



BADGER STATE

SMOKE SIGNALS

For Radio Amateurs • By Radio Amateurs

Published Monthly Since 1969 • Our 29th Year
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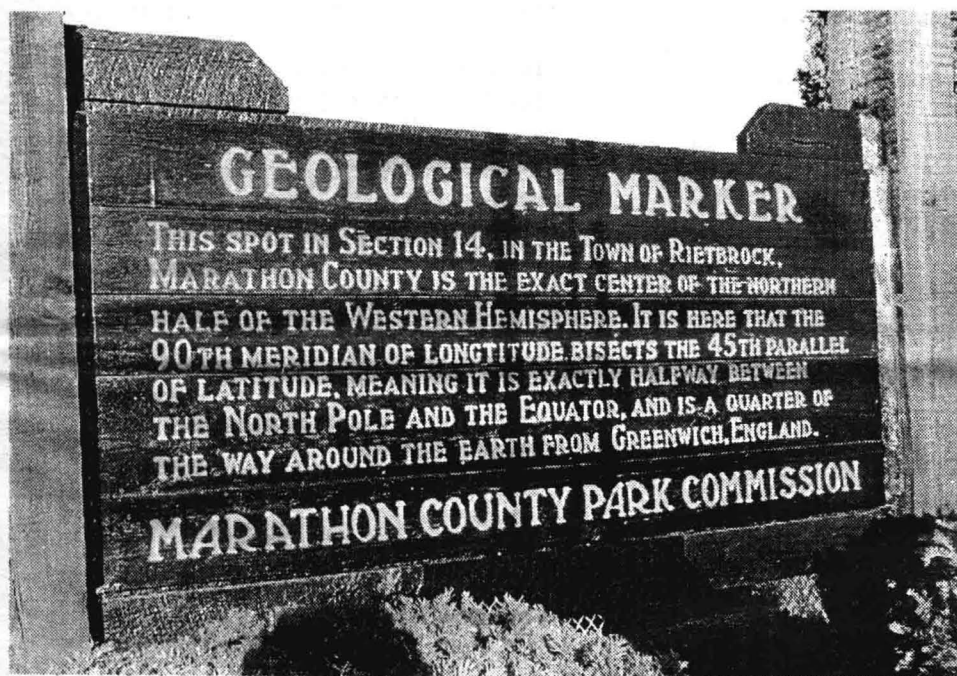
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WVRA's W 9 W observes sesquicentennial from 45/90

By Greg Barr, KB9MCZ



The Wisconsin Valley Radio Association (WVRA) helped celebrate Wisconsin's Sesquicentennial by operating special event station W 9 W.

The station operated using auxiliary power from the *exact* center of the northern half of the western hemisphere, where the 90th meridian bisects the 45th parallel of latitude.

The station was set up at the geological marker (photo above) in the Town of Rietbrock, near Poniatowski in Marathon County. This spot is at the intersection of four grid squares: EN45, EN44, EN55, and EN54, and also exactly halfway between the north pole and the equator, and a quarter of the way around the earth from Greenwich, England.

The station began operations at 6 p.m. local time on May 29, 1998, and ran for a 24-hour period on 2M, 70cm, 6M and 20 meters. SSTV was also in use. Many contacts were made, and a special certificate was issued to all sending in QSL cards to commemorate the event.

Approaching storms, wind, and lightning in the last two hours added excitement for the operators, who really enjoyed taking part in this event.

Another photo is on page 5 of this issue. Thanks to Greg and WVRA for the story. □

AAA says LMCC "backing off" 70 cm request

An official of the American Automobile Association says the Land Mobile Communications Council is backing away from its request that the FCC reallocate 420 to 430 MHz and 440 to 450 MHz from the federal government to the Private Mobile Radio Service (PMRS). And the AAA's Gary Ruark says he doubts the FCC will ever agree to the request in the face of strong support for continued Amateur Radio presence on the band. Amateur Radio has a secondary allocation on the band. The AAA is an LMCC member.

In an August 31 letter to San Diego SEC David Doan, KC6YSO, Ruark, said

that strong support for ham radio from the Association of Public Safety Communications Officials-International (APCO) and the National Telecommunications & Information Administration caused the LMCC to back off its demand to reallocate the 70 cm subbands it had requested last spring. Because of that, Ruark said, "it is doubtful that the FCC would ever agree to that portion of the LMCC petition addressing sharing with amateur radio operators."

In June, AAA asked the LMCC to file supplemental comments with the FCC to

Please turn to page 9

FCC issues errata on "streamlining" NPRM

The FCC has clarified most of the questions and confusion raised by its recent Amateur Radio rules "streamlining" proposal, WT Docket 98-143. The Commission issued some corrections and clarifications in a 13-page Errata to the original NPRM, released in early August.

The FCC said the corrections were issued "to conform the proposed rules to the proposals discussed in the text of the Notice."

A major change from the original rulemaking proposal was to effectively reinstate language providing for a physician's certification that an applicant is unable to pass a 13 or 20 WPM Morse code test. In the NPRM text, the FCC invited comment on this issue and on an earlier ARRL proposal, RM-9196. The ARRL had asked the FCC to require anyone applying for an exemption pursuant to a doctor's certification to first attempt the higher-speed test before getting exam credit.

The Commission also clarified its intention to retain the current 365-day time limit for a Certificate of Successful Completion of Examination (CSCE) to remain valid.

The FCC also added the words "Element 1(A), 1(B) or 1(C)" to proposed Section 97.301(e), referring to the 5, 13, and 20 WPM code examination elements, respectively. While this clarified the need to at least have credit for the 5 WPM Morse code examination to gain Novice/Tech Plus HF privileges, neither the original NPRM nor the Errata list Element 1(A) -- the 5 WPM code test -- as a spe-

cific requirement for any license class. The FCC appears to be proposing to provide that a Technician licensee could gain HF privileges by passing a 5 WPM code test. Just how this would happen in the real world remains unclear.

The FCC describes elsewhere in its proposed rules how applicants may claim credit for Element 1(A), however. A proposed change at Section 97.507(d) that would have substituted the words "no less than 5 WPM" has been dropped. The current wording says "no less than the prescribed speed."

The FCC also addressed apparently inadvertent rules changes in the NPRM. Gone is language that would have eliminated Extra class phone and image privileges in the 20 and 15-meter Extra class phone subbands and data privileges in the 20 and 15-meter Extra class CW subbands. Also gone is wording that would have dropped data privileges from Novices and phone privileges for current Tech Plus operators on 10 meters. The FCC also eliminated wording that seemingly would have limited Novice CW operation to "only messages sent by hand."

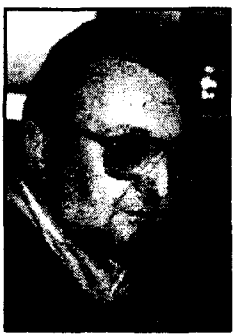
The FCC's Errata also indicate that the Commission intended to retain the current 200 W PEP power limit on the current Novice/Tech Plus HF bands. The NPRM had proposed imposing the 200 W PEP power restriction on HF only when the control operator is a Novice.

The FCC also made it clear that someone holding a Technician class license

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WHAT'S HAPPENING

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Edited by Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901 • kebner@palacenet.net

Swapfests and Other Social Events

SATURDAY, NOVEMBER 7, 1998. 13th annual "6.91 Friendly Fest, at the Waukesha County Expo Center Forum, N1 W24848 Northview Rd., Waukesha, WI. 1-94 to County J, South to FT, West to Expo. Open 8:00 a.m. to 1:00 p.m. Sellers admitted at 5:30 a.m. Tickets \$5.00. 4-foot tables \$5.00. On-site Amateur exams. Contact: KB9PHA, Mike, (414) 258-4435 or Milwaukee Repeater Club, PO Box 2123, Milwaukee, WI 53201. Web page <http://www.execps.com/~mrc/friendlyfest.htm>

SUNDAY, NOVEMBER 8, 1998. Fox Cities Hamfest, Starlite Club, Hwy. 55 & County JJ North of Kaukauna, WI. VE testing (contact: Larry Siebers, KD9IA, (920) 757-1167, Food and Refreshments, Vendor setup 6:00 a.m., Doors open 8:00 a.m. Contact: Chad Pennings, N9PRC, 1912 Russett Ct., Apt. 7, Appleton, WI 54914. (920) 993-0485.

SATURDAY, JANUARY 9, 1999. West Allis Radio Amateur Club, 27th annual Midwinter Swapfest, Waukesha County Expo Center Forum, Waukesha, WI. Contact: WARAC, PO Box 1072, Milwaukee, WI 53201-1072.

TUESDAY, FEBRUARY 23, 1999. Red Cedar Repeater Association Auction. American Legion Post 53, 634 Water Street, Eau Claire, WI. Contact: Steve Hart, KA9OMC, E616 810th Ave., Knapp, WI 54749. (715) 665-2374.

SUNDAY, APRIL 11, 1999. MARA Swapfest, Madison, WI. Middleton Conference Center. (Same place as last year, but new name.) Contact: MARA, PO Box 8890, Madison, WI 53708-8890.

SATURDAY, JULY 10, 1999. South Milwaukee

Amateur Radio Club Swapfest, American Legion Park, Shepard Avenue, South Milwaukee, WI. Contact South Milwaukee ARC, P.O. Box 102, South Milwaukee, WI 53172. (414) 762-3235.

SUNDAY, JULY 25, 1999. Racine, WI. The Racine Megacycle Club, Amateur Radio & Computer Show. Contact:

e-mail: w9udu@wi.net
voice mail: (414) 552-6RMC
web page: <http://www2.wi.net/~hamradio/>

See also the back page and flyer ads for additional information on many of these events.

Let us know of your dates as soon as you know them. We will list them and perhaps help avoid conflicts with other events.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas. Send information on your event to Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages. For information on rates and requirements for our advertising pages, please contact K9ZZ or K9EN.



CLUB MEETINGS

Due to space limitations, we cannot always carry the full listing of Wisconsin and area club meetings. Please see the September 1998 meetings column for the latest complete listing. The following changes have been reported to BSSS since that listing.

the 9th of that month. This material is to be sent to the Editor.

Where to Send It

Address changes and corrections, and exchange papers should be sent to Ken Ebner.

Editorial material, photographs, and feature articles should be sent to Jim Romelfanger.

Inquiries about advertising should be directed to Ken Ebner.

Club, swapfest, and Test Point information should be sent to Ken Ebner.

Swapfest ADS should be sent to Jim Romelfanger NO LATER THAN EIGHT WEEKS BEFORE THE EVENT'S DATE.

Subscriptions should be sent, with check or money order, to Ken Ebner.

Conditions for Reprinting or BBS Posting Material from Badger State Smoke Signals

Permission is hereby granted to reprint articles or posting articles on radio or telephone bulletin boards from *Badger State Smoke Signals*, providing credit is given to the original author, publication in which the article first appeared, and to *Badger State Smoke Signals*. THIS CREDIT IS MANDATORY, AND NO MATERIAL MAY BE PRINTED OR POSTED UNLESS IT IS GIVEN.

This newspaper is produced by volunteer radio amateurs, and is non-profit. This newspaper is mailed from Portage, WI 53901.

Badger State Smoke Signals is incorporated as a Wisconsin non-stock, non-for-profit organization.

Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other individual or organization.

EAU CLAIRE AMATEUR RADIO CLUB

2nd Tuesday - 7:30 PM Eau Claire, Parks & Recreation, 1300 First Ave, Eau Claire, WI 54703. All hams and guests welcome. Wide area coverage repeater KB9RRA 146.910 Mhz. For more info: Jim Staatz KG9MV 715-838-9108 kg9mv@ecol.net

The Test Point



*Amateur Radio Examination Locations
and Schedules in the Wisconsin Area*

October 03, 1998	Oshkosh (Omro), WI
October 03, 1998	Racine, WI
October 03, 1998	St. Paul, MN
October 03, 1998	Pewaukee WI
October 08, 1998	Apple Valley, MN
October 10, 1998	Blaine, MN
October 10, 1998	Eau Claire, WI
October 10, 1998	Madison, WI
October 10, 1998	Oak Creek, WI (MRAC)
October 17, 1998	Cottage Grove, MN
October 17, 1998	Loves Park, IL
October 17, 1998	Milwaukee, WI (BE)
October 20, 1998	Eden Prairie, MN
October 24, 1998	Bloomington, MN
October 31, 1998	Milwaukee, WI (MRAC)
October 31, 1998	Tomahawk, WI
November 01, 1998	Kaukauna, WI
November 07, 1998	Menomonee, WI
November 07, 1998	Onalaska, WI
November 07, 1998	Oshkosh (Omro), WI
November 07, 1998	Racine, WI
November 07, 1998	Pewaukee WI
November 07, 1998	St. Paul, MN
November 12, 1998	Apple Valley, MN
November 14, 1998	Blaine, MN
November 14, 1998	Madison, WI
November 14, 1998	Oak Creek, WI (MRAC)
November 17, 1998	Eden Prairie, MN
November 18, 1998	Sheboygan, WI
November 21, 1998	Cottage Grove, MN
November 21, 1998	Loves Park, IL
November 21, 1998	Milwaukee, WI (BE)
November 28, 1998	Bloomington, MN
November 28, 1998	Milwaukee, WI (MRAC)
November 28, 1998	Tomahawk, WI
December 05, 1999	Stevens Point, WI
December 05, 1998	Oshkosh (Omro), WI
December 05, 1998	Racine, WI
December 05, 1998	Pewaukee WI
December 05, 1998	St. Paul, MN
December 10, 1998	Apple Valley, MN
December 12, 1998	Blaine, MN
December 12, 1998	Madison, WI
December 12, 1998	Oak Creek, WI (MRAC)
December 15, 1998	Eden Prairie, MN
December 19, 1998	Cottage Grove, MN
December 19, 1998	Loves Park, IL
December 19, 1998	Milwaukee, WI (BE)
December 19, 1998	Milwaukee, WI (BE)
December 26, 1998	Bloomington, MN
January 02, 1999	Oshkosh (Omro), WI
January 02, 1999	St. Paul, MN
January 09, 1999	Blaine, MN
January 09, 1999	Eau Claire, WI
January 09, 1999	Madison, WI
January 09, 1999	Oak Creek, WI (MRAC)
January 12, 1999	Apple Valley, MN
January 16, 1999	Cottage Grove, MN
January 16, 1999	Loves Park, IL
January 16, 1999	Milwaukee, WI (BE)
January 16, 1999	Milwaukee, WI (BE)
January 18, 1999	Eden Prairie, MN
January 23, 1999	Appleton, WI
January 25, 1999	Bloomington, MN
January 30, 1999	Milwaukee, WI (MRAC)

Badger State Smoke Signals

*Amateur Radio
Education and Information*

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EDITORIAL BOARD: Ken Ebner, K9EN; Dave Knaus, WA9POV; Don Evenson, K9JYX.

Subscriptions

1 year	(12 issues)	\$13.95
2 years	(24 issues - save \$1.95)	\$25.95
3 years	(36 issues - save \$3.90)	\$37.95

Subscription form is on page 5. Special club package reduced rates are available. For information, contact Ken Ebner, K9EN.

When to Send It

The closing date for each issue is the first of the month for the next month's issue. For example, the closing date for the June issue is May 1. The only exception is for participating clubs' minutes. Participating clubs are requested to send their material no later than FIVE DAYS after the club's meeting. For example, if a club meets on the 4th of the month, the material should be sent no later than

January 30, 1999 Tomahawk, WI
 February 06, 1999 Oshkosh (Omro), WI
 February 06, 1999 Racine, WI
 February 06, 1999 St. Paul, MN
 February 11, 1999 Apple Valley, MN
 February 13, 1999 Blaine, MN
 February 13, 1999 Madison, WI
 February 13, 1999 Oak Creek, WI (MRAC)
 February 16, 1999 Eden Prairie, MN
 February 20, 1999 Cottage Grove, MN
 February 20, 1999 Loves Park, IL
 February 20, 1999 Milwaukee, WI (BE)
 February 20, 1999 Milwaukee, WI (BE)
 February 27, 1999 Bloomington, MN
 February 27, 1999 Milwaukee, WI (MRAC)
 February 27, 1999 Tomahawk, WI
 March 06, 1999 Oshkosh (Omro), WI
 March 06, 1999 Racine, WI
 March 06, 1999 St. Paul, MN
 March 11, 1999 Apple Valley, MN
 March 13, 1999 Blaine, MN
 March 13, 1999 Madison, WI
 March 13, 1999 Oak Creek, WI (MRAC)
 March 16, 1999 Eden Prairie, MN
 March 20, 1999 Milwaukee, WI (BE)
 March 20, 1999 Cottage Grove, MN
 March 20, 1999 Loves Park, IL
 March 20, 1999 Milwaukee, WI (BE)
 March 27, 1999 Bloomington, MN
 March 27, 1999 Menomonee, WI
 March 27, 1999 Milwaukee, WI (MRAC)
 March 27, 1999 Tomahawk, WI
 April 15, 1999 Milwaukee, WI (BE)
 November 06, 1999 Menomonee, WI
 Monthly, 1st Sat. Racine, WI
 (except January, July & August)
 Monthly, 1st Sat. Oshkosh (Omro), WI
 Monthly, 1st Sat. St. Paul, MN
 Monthly, 2nd Thu. Apple Valley, MN
 Monthly, 2nd Sat. Oak Creek, WI (MRAC)
 Monthly, 2nd Sat. Madison, WI
 Monthly, 2nd Sat. Blaine, MN
 Monthly, 3rd Tue. Eden Prairie, MN
 Monthly, 3rd Sat. Milwaukee, WI (BE)
 Monthly, 3rd Sat. Loves Park, IL
 Monthly, 3rd Sat. Cottage Grove, MN
 Monthly, 4th Sat. Bloomington, MN
 Monthly, Last Sat. Milwaukee, WI (MRAC)
 (except December)
 Monthly, Last Sat. Tomahawk, WI
 (January thru October only)
 Quarterly Eau Claire, WI
 (Second Saturday Jan., Apr., & Oct.)
 plus annual summer hamfest.)

Many Swapfests/Hamfests offer exam sessions. If not shown above contact the sponsoring club in the Swapfest column on page 2.

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

GENERAL RULES FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Some examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL. Send a 32¢ SASE if you request one from the ARRL. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$6.35 payable to "ARRL/VEC".

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE or CSCE to the VEC. You must also have two good copies of your license or CSCE. A copy of your license or CSCE must be attached to your FCC form 610 and most VEC want a copy for their records. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

For those with internet access, a listing of exam sessions is available from:

<http://www.arrl.org/arrlvec/examsearch.phtml>

By checking this page, a person can find out registered

VE sessions anywhere in US and some overseas. You can search by country, state or zip code. The listing is not specific to any particular VEC, it is a master database. (Thanks to KB9EQI for information.)

MILWAUKEE RADIO AMATEURS' CLUB (MRAC/VEC)

SECOND SATURDAY - OAK CREEK, WI
 LAST SATURDAY - MILWAUKEE, WI

SECOND SATURDAY DATE: 1:00 p.m. to 3:00 p.m. at Wauwatosa Savings Bank, 6560 S. 27th St., Oak Creek, WI.

LAST SATURDAY DATES: (except December): 9:00 a.m. to 12:00 noon at Amateur Electronic Supply (AES), 5710 W. Good Hope Rd., Milwaukee, WI. Note: For Additional Information: Call (414) 466-HAMS (Answering Machine).

Bring along your ORIGINAL license, CSCE (if any) and one (1) good quality photocopy of each, plus two forms of identification, such as a driver's license, etc. Also required is \$6.35 for the exam fee. WALK-INS are welcome. To register in advance, use a post card: Print the grade of license you are applying for, your name, address, and telephone number. Send the card to MRAC/VEC, Milwaukee Radio Amateurs Club, PO Box 25707, Milwaukee, WI 53225.

BADGER EXAMINERS (BE) - MILWAUKEE

Badger Examiners group tests at AES (Amateur Electronic Supply) at 60th and Good Hope, every third Saturday MORNING. Exam times are 9:30 a.m. to 12:00 noon, at the old Sterman Printing shop, just 300 feet west of the AES store. Novice to Extra are offered, and all test materials are provided. Fee is \$6.35, and bring your original license, or CSCE if needed. Also available are Commercial license exams GROL (General Radiotelephone license), GMDSS, Telegraph, Etc. Fee is \$35.00. For more information call Gary Sharbuno, W19M at (414) 355-0237.

MADISON, WI

VE exams are held in Madison every second Saturday morning of the month at 8 a.m. They are held at the operations building of the Madison Metropolitan Sewerage District at 1610 Moorland Rd. To get there take the Beltline (Hwy 12 & 18) to South Towne Drive. Go south 8/10 mile till South Towne Drive makes a bend and becomes Moorland Rd. and enter at gate.

You should bring a picture ID, your original licence and a copy of your licence. For exams beyond the novice tests, bring a check for \$6.35, made out to the ARRL/VEC. If the special 610 form with the medical exemption is required, contact me beforehand to obtain one. No appointments are necessary to take exams. For further questions, please leave a message on the mailbox or phone me at (608) 832-6631.

Mark Jenks, N29B

MENOMONIE, WI

VEC Exams of all levels will be held Saturday, November 7, 1998 at the UW-Stout Communications Center, 820 South Broadway, Menomonee, Wisconsin. Walk-ins only. Walk in between 9:00 and 11:00 am. For further information, contact Jim Ley, NX9F. (W) 715-232-1397 or (H) 715-235-3998.

STEVENS POINT, WI

ARRL Exams in Stevens Point, December 5, 1998. Time: 0930. Place: A107 Science Building, on campus at UWSP (corner of Fourth and Reserve streets) For more information contact Joe Larson, N9JW, at 715-344-1182 evenings or email to joel8@bigfoot.com.

RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except January, July, and August.

Monthly exams are given 9:00 to 11:00 a.m. at the Red Cross Building, 4521 Taylor Avenue, Racine. Walk-ins are permitted.

Talk in on 147.87/.27. Inquiries and registrations should be directed to Robert N. Jensen, W0WLN, 5616 Cambridge lane #6, Racine, WI. Telephone (414) 886-8551.

TOMAHAWK, WI Last Saturday of every month. Jan. thru Oct.

Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No preregistration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Terry Collins, KB9AUP, W6564 Highway 8, Tomahawk, WI 54487. Telephone (715) 453-4633.

APPLETON, WI - ARRL/VEC MANITOWOC, WI (HAMFEST) KAUKAUNA, WI (HAMFEST)

Conducted by the Fox Cities ARC VE team. All test sessions in Appleton are held at James Madison Jr. High, 2020 S. Carpenter Street. Testing starting at 8 a.m. For Appleton information, contact George R. Croy, W9MDP, 2113 Twin Willows Drive, Appleton, WI 54914. (920) 730-0967. For Manitowoc or Kaukauna information, contact Larry Siebers, KD9IA (920) 759-1167.

OSHKOSH (OMRO)

The Oshkosh VE Team will administer Amateur Radio exams monthly on the first Saturday. Registration begins at 8:30 a.m. and exams will be given from 9 a.m. until noon at the Omro Community Center, 130 W. Larrabee, Omro, WI. Walk-ins welcomed. Bring a good quality photocopy of your original license and any other necessary documents such as a CSCE, etc. The first session will be through W5YI/VEC, and then sessions will alternate between ARRL/VEC and W5YI/VEC. The exam fee is \$6.35. For more information, please call Dick Lemme, K9FA, at (920) 235-0987, e-mail lemme@vbe.com, or write Dick at 826 Jefferson Street, Oshkosh, WI 54901.

EAU CLAIRE, WI

The Eau Claire ARC will hold exam sessions on the second Saturday in the months of January, April, and October, as well as on the date of their annual hamfest during the summer. For more info: Steve Bluem KA9OMY 715-839-6509

SHEBOYGAN, WI

Wednesday dates: Registration 1830 hrs, testing 1900 hrs.

Saturday dates: Registration 0830 hrs, testing 0900 hrs.

Testing site is: Red Cross/Boy Scout Office Building (lower level), 2032 Erie Ave., Sheboygan, WI.

Test site has limited handicap accessibility. Walk-ins are OK but preregistration would be appreciated. Test fee is \$6.35. Make checks payable to SCARC VE Testing. All class tests administered. Contact: Art Pahr, K9XJ, (920) 876-2370. e-mail <k9xj@excel.net>

ONALASKA, WI (ARRL/VEC)

The Riverland Amateur Radio Club will hold test sessions at the Onalaska Public Library, 741 Oak Avenue South. registration begins at 9:0 a.m. with testing at 9:15 a.m. Please bring two forms of identification and two copies of all original documents, CSCEs, license, etc. For more information contact: Roger Reader, KA9BKK, 526 13th Ave. N., Onalaska, WI 54650. (608) 783-0723.

MEDFORD, WI (ARRL/VEC) Taylor County Area AREC. Registration starts 8:30 a.m., testing starts 9:00 a.m. Location: The conference room in the lower level of the Sheriff's annex to the Taylor County Courthouse, corner of 2nd and Ogden Sts., Medford, WI. Take Ogden St. west off of Hwy. 13 to the courthouse. Park in the lots on the east or south sides of the courthouse or on the street. PLEASE use the entrance on the south side of the courthouse and watch of the signs. Walk-ins welcome. Contact: Tom Hrdina, N9GEN, 2373 Willow Ave., Medford, WI 54451. (715) 748-4054

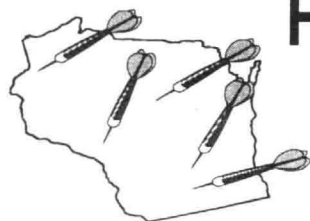
PEWAUKEE, WI

With the summer break and Labor Day, we won't be able to start exams again until October. The dates are: October 3, November 7, and December 5, 1998. The location is a little more handicap accessible, room S110 in the back of the science building by the handicap parking interance. WCTC is on Hwy JJ off Hwy 16 from the East I-94 and Hwy T from West I-94 just north of GE Medical Systems. Tests start at 9:00 AM and registration ends at 10:00 AM. Contact: Al Johnson, AA7CS

CEDARBURG, WI - ORC HAMFEST
 EAU CLAIRE, WI - ECARC HAMFEST
 GREEN BAY, WI - ARES HAMFEST
 HAYWARD, WI - HAYWARD HAMFEST
 KAUKAUNA, WI - SWAPFEST
 MANITOWOC, WI, LAKESHORE HAMFEST
 OAK CREEK, WI - SMARC HAMFEST
 RACINE, WI - RACINE HAMFEST
 RHINELANDER, WI - NWARC SWAPFEST
 ROCKFORD, IL - RARC HAMFEST
 ROTHSCHILD, WI - WVRA HAMFEST
 SOUTH MILWAUKEE, WI - SMARC HAMFEST
 STEVENS POINT, WI - CWRA SWAPFEST
 WAUKESHA, WI - MIDWINTER SWAPFEST
 DUBUQUE, IA - HAMFEST

See the Swapfest column for additional information and contact persons.

(continued on page 15)



HERE and THERE

New vanity address for paper filers

Effective September 14, there's a new address at Mellon Bank for vanity call sign paper application filers who submit Form 610V and FCC Fee Remittance Form 159 with the vanity fee via the US Postal Service.

The new address is:

FCC Wireless Bureau Applications, POB 358130,
Pittsburgh, PA 15251-5130.

Electronic Form 610V Vanity Call Sign filers will continue to send Form 159 with the vanity fee to FCC Amateur Vanity, POB 358994, Pittsburgh PA 15251-5994.

A reminder: The vanity call sign filing fee drops from 50 dollar(s) to 13 for dollar(s) applications filed on or after September 14, 1998.

The FCC in Gettysburg reports it has processed vanity applications received through August 14.

ARRL Bulletin 60, 9/4/98

Question pool changes put on hold

Citing "almost certain and imminent restructuring of licensing," the Question Pool Committee--the group that formulates the questions that show up on Amateur Radio examinations--has put further changes to the question pool on hold until restructuring issues are settled.

ARRL/VEC Manager Bart Jahnke, W9JJ, says the

pool update, scheduled for revision and release this year for implementation next July 1.

The Committee says restructuring could cause anything from making a few rules questions unusable to "total deletion of one or more question pools or even combination of two or more of the present question pools into a differently configured question pool."

The decision to put further revisions to the question pool on hold had majority support of the National Conference of VECs. The QPC will postpone its current question pool review schedule "until the direction of such restructuring is more certain," QPC Chairman Ray Adams, W4CPA, said in a statement.

Adams said the QPC would announce when it's decided to resume alterations to the question pools. "The action required by that decision could range from a simple resumption of rewriting of the question pools much in the same manner as we have in the past to issuing any necessary supplements containing the changes to each of the question pools in use to combining certain pools in whatever manner may be dictated by the Commission," he said.

The ARRL Letter, 9/4/98

Like great big sparks and 12-foot arcs? Come to this open house!

Resonance Research Corporation, manufacturer of industrial-strength Tesla coils and other spectacular apparatus, will hold an open house on Monday, October 12 from 7 to 10 p.m.

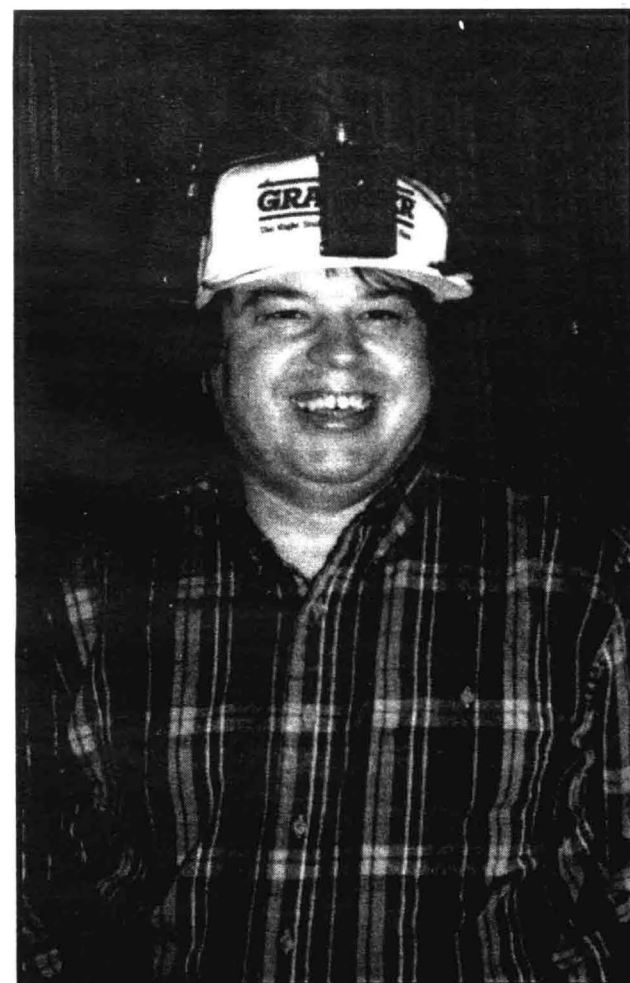
The company is known worldwide for innovative Tesla coil design, especially for a design of coil that generates voltages in the 12 megavolt range, but which are considerably smaller than coils producing that potential prior to the company's new designs.

Resonance Research is on Shady Lane Road, just east of Sauk County Trunk A, between Baraboo and Lake Delton. It's about six blocks east of the intersection of those roads on the north side.

You could find your hair *really* standing on end!

It will be dark at that time of day and the deer rut will be starting. Sauk County is loaded with the wily

Smile! You're on Candid Cap!



What Jim Paul, N9LKY, saw, everyone at the monitor saw too. Jim was decked out in his ATV camera-transmitter cap for a ham demo to the public.

K9ZZ photo

whitetails, so caution in driving is strongly urged.

If you have any old 3600 RPM sync Teletype motors laying around, bring them along.

The owner of Resonance Research is a former ham and all-around good guy, D. C. Cox.

Updated e-mail list scheduled for November

The final e-mail list for Wisconsin hams for 1998 will be published in our November issue.

Please send your additions and corrections to:
WA9POV@execpc.com

Proposed postage hikes force QSL service to adjust

Starting in 1999, the ARRL Outgoing QSL Service will increase its fees from \$4 to \$6 a pound. ARRL Membership Services Manager Bill Kennamer, K5FUV, says the move is necessary to absorb the effects of a proposed postal rate increase and to bring the money-losing service a bit closer to a break-even basis. The rate for quantities of 10 cards will remain at \$1.

Kennamer said the rate increase represents a cost of 4 cents per card (based on 150 cards per pound) to sort, package and mail QSL cards to the bureaus of the other IARU member societies. "Even with the increase, this still represents one of the better bargains in services to ARRL members," he said.

Inaugurated in 1976, the Outgoing QSL Service provides an economical way for ARRL members to send their QSL cards to amateurs in other countries. Today, two fulltime employees handle the more than 2 million cards that show up most years.

"The ARRL has subsidized the Outgoing QSL Service since the beginning, and continues to do so today," Kennamer explained. He said the League's handling and mailing costs now run more than \$9 a pound, leaving a shortfall of more than \$5 per pound at the current rates.

The last rate increase, to \$4 a pound, was three years ago.

The ARRL Letter, 9/11/98

JY1 active from US

During his stay in the US for medical treatment, King Hussein of Jordan, JY1, has been active on HF, and AMSAT Area Coordinator Bruce Paige, KK5DO, in Houston, is among those with a QSL to prove it. And what a QSL it is!

Hussein, who suffers from lymphoma, has been in the US for treatment of the disease earlier this summer

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Silent Key

Harrison (Harry) C. Mayland, K9FFT, of Palo Alto, CA, and formerly of Baraboo, age 85, died Thursday, September 3 at Stanford Hospital in Palo Alto.

Harry was a member of the Yellow Thunder Amateur Radio Club, and was also a computer hobbyist, often writing his own software.

at the Mayo Clinic in Minnesota. While still in the US, he also made time to get on the radio. Paige worked JY1 on August 22 around 2200 UTC on 20-meter SSB "for about 10 minutes until the pileup got to be too much."

Paige said Hussein had been working a US op who had just undergone the same cancer treatment that the King was starting, but then signed off. He showed up on frequency later when his QSL manager, WA3HUP, came on the air, and Paige eventually got to work him. "I have worked astronauts aboard the shuttle, cosmonauts aboard the Mir, DX stations on rare islands," Paige said. "None of then gave me the rush that talking to the King has done. That was a very exciting moment for me."

Hussein also was on the air Sunday, August 30. Paige said he got his QSL about a week later via WA3HUP. It's very likely the only QSL card decorated with gold leaf. You can see it at <http://www.amsatnet.com/jy1.html>.

The ARRL Letter, 9/11/98

Some Sweepstakes sections play hard to get

All testers know the toughest ARRL/RAC sections to snag during the ARRL November Sweepstakes -- or at least they think they do. But accountant Doug Richardson, VESMA, "could not resist playing with the numbers" and has ranked the hard-to-get sections in both the CW and phone events -- from 1 to 78.

Most people who've ever attempted a clean sweep during Sweepstakes would probably guess Yukon/Northwest Territories (VE8/VY1) as the most elusive section. The real surprise from Richardson's data is that VE8/VY1 came in third place -- behind Wyoming and Newfoundland-Maritime -- on CW and second behind Puerto Rico on SSB. His analysis and rankings are detailed in the article ARRL Sweepstakes "Need List" on page 20 of the September/October issue of *National Contest Journal* (NCJ).

Working from 1996 and 1997 Sweepstakes results, Richardson teased out a combined ranking for all 78 ARRL/RAC sections. The results will be of interest to anyone who's ever tried to put those final few mults into the log in a quest to work all 78.

On CW, the top five hardest sections were: Wyoming, Newfoundland-Maritime (split in 1997), Yukon/NWT, Quebec, and Saskatchewan. On SSB, the toughest five sections to get were Puerto Rico, Yukon/NWT, Alaska, Newfoundland-Maritime, and Quebec.

What was the easiest section to snag? On CW, it was South Texas. On phone, it was Michigan, according to Richardson's statistics.

See you in the Sweeps!

The ARRL Letter, 9/11/98

Amateur Radio has high profile at ITU conference

Amateur Radio will enjoy a high degree of visibility when the ITU Plenipotentiary Conference convenes next month in Minneapolis--even though ham radio frequency allocations are not on the agenda. ARRL Technical Relations Manager Paul Rinaldo, W4RI, has been appointed to serve as a member of the US delegation to the international gathering, October 12 to November 6. ARRL International Affairs Vice President and International Amateur Radio Union Secretary Larry Price, W4RA, will attend under United Nations auspices. Price will serve as senior advisor on Emergency Telecommunications for the UN Office of Humanitarian Aid. The longtime former director of the ITU Radiocommunication Bureau, Richard Kirby, W0LCT, also will attend on behalf of Amateur Radio.

ARRL President Rod Stafford, W6ROD, and Executive Vice President David Sumner, K1ZZ, are expected to visit the conference but will not participate as delegates.

While Amateur Radio matters are not specifically slated for discussion at the conference, "there are items on the agenda that have the potential to affect us," said

The W 9 W antenna farm



The Wisconsin Valley Radio Association's (WVRA) operation commemorating the Wisconsin Sesqui-centennial did not lack for good antennae. This photo shows only about half of the total antennae used for the short-term operation from the 45/90 marker near Wausau. Thanks to WVRA for the photo.

Two special event stations will be on the air during the conference. W98ITU will be set up in the conference center at Minneapolis, run by operators from the Twin Cities area. The primary W98ITU operating position will control a remote Kachina transceiver and antenna site some 15 miles from the conference center. A second operator position will use a Ten-Tec OMNI VI Plus, solid-state amp, and an Explorer 14 beam at the conference site. W98ITU is expected to be on the air during the day on weekdays and for entire weekends. A full-fledged satellite station also will be on the air, according to ARRL Dakota Division Director Tod Olson, K0TO, who's coordinating the operating activity. Also during the conference, the W0AIH (near Eau Claire, WI - BSSS ed.) multiop station will use the call sign N98-ITU during the CQ Worldwide Contest (SSB) October 24-25. Separate, special event QSL cards will be available for those working either W98ITU or N98ITU.

The ITU Plenipotentiary Conference -- held every four years -- is the organization's top policymaking body. It sets general ITU policies, adopts five-year strategic and financial plans, and elects the senior management team.

One good sign for the hobby in terms of its international presence is the fact that the current director of the Radiocommunication Sector, Robert W. Jones, VE3-CTM, is the only one of the three incumbent sector directors who is unopposed for re-election.

The Minneapolis "plenipot" marks the first time in more than 50 years that a Plenipotentiary Conference will be held in the US. The last one on American soil was in Atlantic City, New Jersey in 1947.

The ARRL Letter, 9/17/98

Your stories, articles and photos are needed and welcome. Send to K9ZZ, address on page 2.

Correction to email address correction

We printed a correction last month to Duane Olson's e-mail address. It had appeared in our list two months ago, but had an error. The correction we ran had the bad address, too. Here's our second attempt to get it right:

Duane Olson, W9GGN

olson@wi-net.com

Amherst Jct., WI

Leonid Labutin, UA3CR/AB4LZ, SK

A major player in the Russian Amateur Radio satellite scene, Leonid Labutin, UA3CR, died September 10 at his summer residence near Moscow. He reportedly suffered a heart attack. He was 70.

Labutin was directly involved in various RS satellite projects and helped bring ham radio into the Russian Mir space station. AMSAT-DL's Peter Guelzow, DB2OS, says he worked with Labutin on the first Russian/German AO-21/RS-14 project. Guelzow says Labutin also helped with the Phase 3D project, and he remained active in the amateur satellite field until his death.

"I personally lost a good friend and will miss him," Guelzow said in a posting to the AMSAT Bulletin Board.

Georgia Section Manager Sandy Donahue, W4RU, recalls that Labutin was a guest at the 1988 AMSAT National Conference, among the first Soviet hams to visit the US. After the convention, Labutin was given a complete set of ARRL license manuals. The next day, he passed his Extra, very likely the first Soviet citizen to acquire a US Extra ticket, AB4LZ, which expires in December.

Services were September 12 in Moscow.

The ARRL Letter

Lodi packet BBS moves to new frequency

Jovial Larry Shields, WD9ESU, tells us that his packet BBS has departed 145.75 MHz, and moved back to its original home, 145.07. Who says you can never go home again? Thanks, Larry, for the update.

HPM book available from ARRL

The biography *Hiram Percy Maxim* by Alice Clink Schumacher is the result of nine years of research into the life of the League's co-founder and one of America's truly great pioneers. The book explores Maxim's many devotions as inventor, scientist, writer and humanitarian. Often revered as "The Father of Amateur Radio," Maxim also pioneered in the automobile industry, air conditioning, space research, and invented the famous Maxim gun silencer. Schumacher's 216-page book is a tribute to Maxim's ingenuity and determination. It's \$19.95 and available from the ARRL. Order item no. 7016. Visit ARRLWeb or call toll-free, 888-277-5289.

The ARRL Letter

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OCTOBER 1998

The Computer Corner

By Stan Kaplan, WB9RQR • 105 Martin Drive
Port Washington, WI 53074-9654
(414) 284-9346
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SKAPLAN @ MCW.EDU



No. 59: TIME WARPING CONSUMER ELECTRONICS PRODUCTS

By Guest Author Jeff Kane, KB9QQE
510 Green Bay Road
Thiensville, WI 53092
Jkane@execpc.com

[As I promised you last month, this month's column is by a guest writer. Jeff is a member of the Ozaukee Radio Club as well as a member of my OZARES group. He works in the computer field as a systems designer. I have had him check my column for accuracy on several occasions, including the Y2K article last month. Jeff presents here the most comprehensive and foolproof method of testing your computer, and your other electronic devices, for the Y2K problem. Thanks, Jeff, for sharing your knowledge! Stan WB9RQR]

If you have a concern for the millennium bug, the best thing to do is what we call "Time Warping". Time Warping is simple. Computers do not know the difference between real time and virtual reality. Just tell them today is January 1st, 2000, and they will believe you and act accordingly!

The following steps, or at least the approach they outline, will work with just about any product, be it a computer, a VCR, an alarm clock, or any other programmable consumer electronic device. On the other hand, please realize also that there are so many different products out there that it is impossible to cover them all in detail. The following is an attempt to generalize enough to get questions flowing and to provide you with a step by step approach to see if you need to be concerned.

Remember anything with a date in it is vulnerable to some sort of Y2K problem. The older the device, the greater the chance for a problem. Murphy's Laws also remind us that the more important the item is, the greater the chances for failure. :)

DO NOT PROCEED WITHOUT FIRST PREPARING A KNOWN GOOD BACKUP! Verify that the backup you make is usable. You may lose EVERYTHING while doing this test procedure, which will require that you restore everything from the backup.

1. Warp to December 1999.

Set your clock to December 1999 at 23:50 (12:50 p.m.). Wait and watch what happens. Look at the clock/calendar on the device and see what happens when it should roll over to 2000. If it does not roll over, the Operating System (or hardware for VCR's and clocks) is not Y2K compatible.

Note that most ordinary electronic clocks do not keep track of the year, thus making the above test irrelevant. However, feel free to do the test if you really want to be sure that there is no problem.

If testing a computer, play around a little see if programs open and start, as they should. With a VCR, set it to record in 5 minutes and see if it does. With a clock, set an alarm for 5 minutes away, and see if it works. The general idea is the same with all these devices - just try a few things to see if everything works, as it should.

Even if the roll over to 2000 failed, if your applications/alarms/recordings are working, you can be happy!

2. Test your unit through a power-off cycle.

Turn the power off to the device. This will test the battery/backup power. Wait a couple minutes, and turn it back on. Try everything out again.

First, is the date and time the same as was before you powered it off? Even if it was wrong before, is it the "same wrong"? If it is the same, your hardware has done the best it could. If it is the same AND shows you the correct date and time (per our warped time test), you have Y2K rollover compliant hardware! Jump up and down. Toast the New Year!

Now you will want to try doing some basic things. Set an alarm or recording event again. Open all applications and see what they do. If every thing opens, you are well on your way to being OK.

3. Now, really turn off the power.

Even though you switched off the unit in the last test, it may not have been truly deprived of juice. Many devices still suck electrons from the commercial lines when the power switch is turned off. This time, really deprive it; pull out the power cord. Some consumer devices lose all programming when this happens. You all know the flashing 12:00 joke. Been there, right? Well, you need to be able to recover from a power loss. You will have to reprogram it now.

After the power cord has been out of the wall for a minute or so, plug it back in. Go through all the steps above again. Try a few things to see what happens.

Some devices have a battery in them. Like your alarm clock. It keeps time if power goes out. You need to remove that battery to find out if you can reprogram it. If it still works OK, you have Y2K compatible hardware! Drink another toast to the millennium.

Your hardware and its interface to software are working if all has gone well to this point. There are so many unknowns, that something may have been missed, but at least you have tried.

4. Warp the Operating System.

WARNING: You are getting to a point of no return. In this phase, you could change a date on a file that will make it nearly impossible to get back to today without

Your tests so far may indicate that the hardware is talking to the operating system, but does the OS know what to do with that date? We'll test file handling to find out. File handling is the biggest part of the OS, but you can use this kind of testing idea on any DOS command whether it handles files or not.

Go to a DOS prompt, or to File Manager/Explorer. Set to File Manager/Explorer to display file details. At a DOS prompt, enter DIR to see the file dates. Look at the dates. Are they all OK? At a DOS prompt, type TEST | MORE and press the ENTER key. Type some text and press the ENTER key a couple of times. Type CTRL-Z (hold the CTRL key down and press the Z key) to end. Do another DIR and see what date the new file TEST has. If it is our warped date, all is well. From Windows, create a new file by selecting FILE, then NEW, then TEXT DOCUMENT. See what date was given to the new file. Again, if it is our warped date and time, you are doing well. If not, you are out of luck.

Next, at a DOS command prompt, enter type test | more. You should get a screen echo of what you typed into the file earlier. Do this with a couple of other files to see if it works OK.

You might try the following DOS commands as well: MOVE, DEL, REN (rename), MD (make directory), RD (remove directory), XCOPY, MEM, SCANDISK, SORT, FIND, and any others you like. Once you feel comfortable with the file and OS systems, you can move on to the next step.

5. Warp the Software.

Software may be the worst part of the problem. Although not really relevant to most consumer electronics except computers, you can still use these testing concepts on firmware in any device that cares what year it is.

Be aware that if you have important spreadsheets, or synchronized files from any application, this testing may get those files out of sync, and you may not get them back into sync.

Open up the application. Open the file you want to work with. This may be a spreadsheet, document, or database. It may be your checking account software, or even your email browser. It does not matter since you will want to test all of them.

Make some changes to the file, and save it. Exit the application, and restart it. Open the file again, and see if the changes took. Exit and shut down the computer. Reboot and repeat opening of the file.

Do this for all files you want to test. While you have the application open, try printing to see if that works properly. Since most Windows applications use the very same Windows printer drivers, you probably don't have to test printing of all files, but a small sample would be good. When you have opened, changed, saved, and closed all the files you care to, you are ready for heavy duty application testing.

Make a spreadsheet change that involves a calculation. It would be safest to try changing all the fields that you normally would. Do the save, shutdown, restart thing again, and see if it still works. Do this for database and other applications as well.

Dial up your Internet provider, and see if all the pieces work here also. Remember, your date is warped, so if you send mail, or post messages, you will get strange results. Keep this in mind. Everyone else is at the real today. If you have an Internet time program running, it may try to reset you back to the present.

There are so many applications out there, that you have to decide what is best for you to test. Just try as many things as you can think of. Use these ideas as guides.

6. Assess your problems.

If you made it this far without errors or problems, you should feel confident that your machine successfully passed the warp test. If there were failures, you need to assess the severity. In other words, can you live with the problems, or do you need new hardware? Alternatively, will updated software solve your problems?

7. UnWarp!

OK, now that you have thoroughly messed up the date, how do you get back to today?

There are a couple of things to pay attention to. As mentioned earlier, you need to make sure all the new file dates you created during the testing do not effect you once you return to today. Make sure you did not mess with any files that do automatic timestamp compares. My Briefcase is a perfect example. If you did, you may need to copy those files back from your backup to get the time and date stamp right again. Alternatively, if you have Norton Utilities Version 8 for DOS on your machine, you can use the FD (file date) program to change file dates and times as you please. All you really need to do is to change the file dates and times back to now. Then reboot and things should be back to normal. Work as you normally do, and enjoy the new millennium! You are done.

8. What is the next problem?

You mean there is more? Yep. I would suggest doing the whole thing again, using 2001, 2003, 2006, 2015, or as long as you plan to own your machine. You see, the year 2000 is not the only limitation written into electronic devices. Some ATT computers had a problem with the year 1984. Some computers are going to run out of digits in 2032! The programmer of each device picks a date as time zero, then has the device count up to get to today. When the device runs out of digits, the counter goes back to zero. Both 8-bit and 16-bit operating systems had this problem in the past. Today we are dealing with 32 bit systems, and they will run out of numbers in about 30 years, depending on exactly what day they started with. Hopefully, 64 bit OSs will not run out for a couple of hundred years! Ever hear of built-in obsolescence? A perfect example!

No one except the original programmer can tell you when the application will stop counting, and he isn't talking! Just prepare yourself by having lots of good backups. And, rotate those backups. Don't ever use the same tape. If you do and if the backup fails, you have no old one to go back to, and you just lost your only good one! Not a happy prospect. Good luck, and as Stan says, Happy Computing!

Reprinted, by permission, from the ORC Newsletter, Ozaukee Radio Club, 101 E. Clay Street, Saukville, Wisconsin 53080-1903 (Skip Douglas, KA9DDN, Editor)

A complete collection of all Stan's "Computer Corner" articles, softbound, is available from him at the address in the column heading. The price is \$10.00, and any profit goes to the Ozaukee County Amateur Radio Service (OZARES). If you are sometimes confused by those manufacturers' manuals and the high-level techno-speak they contain, you are likely to find this compendium of use. Over a hundred have been sold so far.

- BSSS

business: Vectronics begins with more than 30 offerings

Vectronics is excited to announce the arrival of the highest quality in electronic hobby kits.

Over 30 different kits are included in Vectronics' new kit line, which provide a professional product at a hobby price. From short-wave converters to aircraft receivers and ham radio kits to an old fashioned crystal radio kit, Vectronics offers something for everyone.

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VEC-1230K	30 Meter CW Transmitter Kit	\$29.95
VEC-1240K	40 Meter CW Transmitter Kit	\$29.95
VEC-1280K	80 Meter CW Transmitter Kit	\$29.95
VEC-1200KC	Case for 20/30/40/80M Transmitter Kit	\$14.95
VEC-841K	Tunable SSB/CW Audio Filter Kit	\$34.95
VEC-841KC	Case for Audio Filter Kit	\$14.95
VEC-820K	Super CW Audio Filter Kit	\$19.95
VEC-820KC	Case for Super Audio Filter Kit	\$14.95
VEC-1290K	AM Radio Transmitter Kit	\$29.95
VEC-1290KC	Case for Radio Transmitter Kit	\$14.95
VEC-1294K	TV Transmitter Kit	\$27.95
VEC-1294KC	Case for TV Transmitter Kit	\$14.95
VEC-121K	Crystal Radio Set Kit	\$19.95
VEC-412K	Ni-Cd Battery Charger Kit	\$49.95
VEC-412KC	Case for Ni-Cd Battery Charger Kit	\$14.95
VEC-422K	SCA Decoder Kit	\$27.95
VEC-422KC	Case for SCA Decoder Kit	\$14.95

Vectronics news release

Information about new products is normally published verbatim as submitted to BSSS. Occasionally, a minimal amount of editing is done without changing claims about the product or service being announced.

ham with an interesting story

I am K9JHK, Jerry Klabunde, and for several years I worked for the Voice of America, Radio Free Europe and Armed Forces Radio and Television. After that I was a design engineer at Continental Electronics based in Dallas, Texas. There I was one of the head design engineers working on super high power transmitters: HF AM modulated transmitters in the power ranges, I know this will be hard to believe, 250 kW to 10,000,000 watts static carrier output.... NOT ERP!

On occasion I give a presentation to Amateur Radio groups on the Voice. I have personal slides from transmitter site A in Greenville, N.C. When I have the time, I am willing to give presentations to Amateur Radio clubs and associations on the Voice's Greenville, N.C. transmitter site A. There were three sites in Greenville, N.C. when I was with the Voice. There were and are now two transmitter sites, A and B, in full operation.

The receiver site C is moved to transmitter site A and receiver site C's building is being set up as a tribute and museum to the Voice and its employees. The studios remain in Washington D.C.

Even today, the Greenville N. C. site is collectively the largest transmitter site in the world. I worked at transmitter site A, Washington, DC, and overseas.

Collectively, the Greenville sites can produce about 13 megawatts of static HF carrier power out.... NOT ERP. To me, a driver of 150kW is not usual.

My slide presentation of the Voice's site A is available at the cost of expenses.

I also lecture all over the world about why advertising works and why it cannot work. My discoveries include what true effective advertising is all about. I am not an advertising agency; I am a consultant to advertisers, advertising agencies, large and small corporations (businesses) and associations of all types. My company's site address is:

<http://www.effectiveadvertising.com>

It is an educational site that is devoted to the study of advertising; why it works and why advertising cannot work. I have been studying the advertising effectiveness issue for over 20 years. It's not my place to take sides. I only point out the realities of advertising effectiveness in today's market place.

My journey is one of the first analytical analysis of advertising. I am a great admirer of Marshall McLuhan's writings and observations. He indeed knew advertising effectiveness; he was the master. His writings stand today as the bench mark in advertising.

I can be contacted at: k9jkh@danet.net

Should anyone be interested in the VOA presentation, they can contact me at my e-mail address or on my company's home page. The same is true about information on my lectures series.

Very 73,
Jerry, K9JHK

FCC SEQUENTIAL CALLSIGN UPDATE

The following is a list of FCC sequentially assigned call signs issued as of September 1, 1998. For more information about the sequential call sign system, see Fact Sheet PR5000 Number 206S or contact the FCC, 1270 Fairfield Rd, Gettysburg, PA 17325-7245, e-mail: [fccitd\(at\)fcc.gov](mailto:fccitd(at)fcc.gov).

District	Group A Extra	Group B Advanced	Group C Tech/Gen	Group D Novice
0	AB0HW	KI0NZ	++	KC0ECE
1	AA1TZ	KE1KG	++	KB1DEZ
2	AB2FN	KG2OY	++	KC2EAH
3	AA3RP	KF3CB	++	KB3CZM
4	AF4LR	KU4UM	++	KF4ZYN
5	AC5RF	KM5SM	++	KD5FDC
6	AD6GN	KQ6XM	++	KF6SQT
7	AB7YX	KK7PN	++	KD7CRE
8	AB8DD	KI8GS	++	KC8KWK
9	AA9WL	KG9OH	++	KB9TIM
N. Mariana Is	NH0F	AH0BA	KH0HE	WH0ABJ
Guam	++	AH2DH	KH2TR	WH2ANX
Hawaii	NH7L	AH6PN	KH7JZ	WH6DEU
American Samoa	AH8R	AH8AH	KH8DM	WH8ABF
Alaska	AL0M	AL7RG	KL0QD	WL7CUW
Virgin Islands	++	KP2CN	NP2KE	WP2AIJ
Puerto Rico	NP3Y	KP3BK	NP3YG	WP4NNX

++ All call signs in this group have been issued in this district.

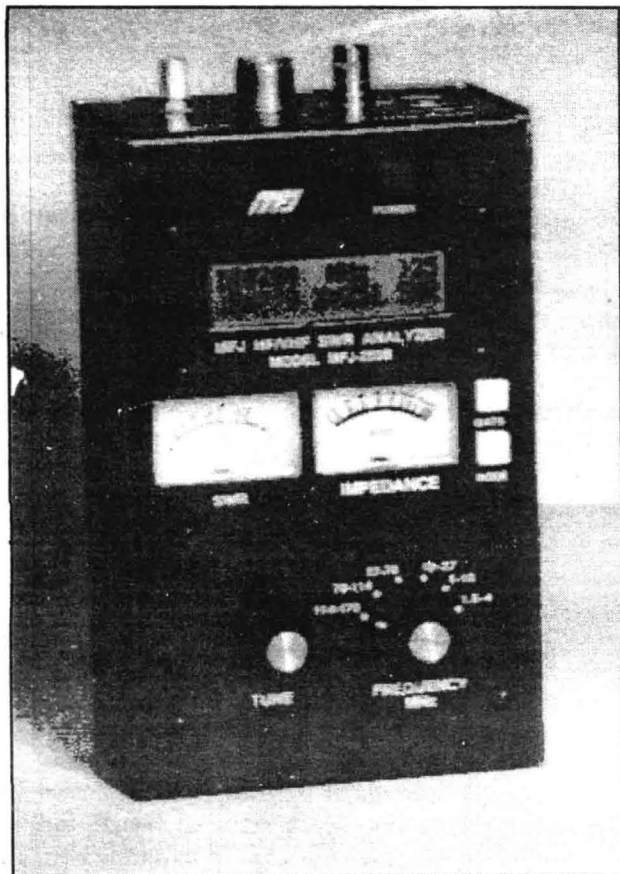
ARRL Bulletin 70, September 10, 1998

A Satisfying Hobby



New Products

MFJ-259B SWR Analyzer



The world's most popular SWR analyzer just got incredibly better and gives you more value than ever! MFJ has added many new features to its popular MFJ-259 and is still the low price leader at only \$249.95!!!

MFJ-259B gives you a complete picture of your antenna's performance. You can read antenna SWR and Complex Impedance from 1.8 to 170 MHz. The MFJ-259B has a built-in frequency counter, side-by-side SWR and Complex Impedance meters, and smooth reduction drive tuning.

It's super easy-to-use. Just set the bandswitch and tune the dial -- just like your transceiver. SWR and Complex Impedance are displayed instantly.

Take the guesswork out of building and adjusting matching networks and baluns. Perfectly tune critical HF mobile antennas in seconds for super DX -- without subjecting your transceiver to high SWR. Measure inductance and capacitance. Troubleshoot and measure resonant frequency and approximate Q of traps, stubs, transmission lines, RF chokes, tuned circuits and baluns. And this is only the beginning!

The MFJ-259B is a complete ham radio test station including -- frequency counter, RF signal generator, SWR Analyzer™, RF Resistance and Reactance Analyzer, Coax Analyzer, Capacitance and Inductance Meter and much, much, more!

The MFJ-259B has eight powerful new features, including:

1. You can read Complex Impedance as series resistance and reactance ($R + jX$) or as magnitude (Z) and phase (degrees).
2. You can determine velocity factor, coax cable loss in dB, length of coax and distance to a short or open in feet.
3. You can read SWR, return loss and reflection coefficient at any frequency simultaneously at a single glance.
4. You can also read inductance in μH and capacitance in pF at RF frequencies.
5. NiCad battery charger function is enabled with a jumper inside the MFJ-259B.
6. Battery Saver function saves the life of your batteries while your SWR Analyzer is not in use.
7. Low Battery Warning feature tells you when you need to replace the batteries. No more climbing all the way up the tower and find out you're not functioning properly.
8. Easy access battery panel lets you get to your batteries quickly. Just two screws let you change out the 10 double AA batteries.

It's truly portable. Take it anywhere - remote sites, up towers, on DX-peditions. It uses 10 AA or Ni-Cad batteries (not included) or 110 VAC with MFJ-1315, \$14.95. Its rugged, all-metal cabinet is a compact 4 x 2 x 6^{3/4} inches.

Call or write for a **FREE** instruction manual! MFJ's comprehensive instruction manual is packed with useful applications -- all explained in simple language you can understand. Check it out before you buy. Call 800-647-1800 or write to MFJ, P.O. Box 494, Miss. St., MS 39762.

Don't forget the accessories! MFJ-99, \$59.95. Accessory package for MFJ-259B includes genuine MFJ-29C carrying case, MFJ-66 dip meter adapter, MFJ-1315 110 VAC adapter. Saves \$5.00!

MFJ's SWR Analyzers™ and accessories are covered

by MFJ's famous No Matter What™ one year limited warranty. That means that MFJ will repair or replace (at our option) your product for one complete year.

To order or for your nearest dealer, call 800-647-1800, FAX 601-323-6551; e-mail:

mfj@mfjenterprises.com

or check out dealer and ordering information on our fantastic web site:

<http://www.mfjenterprises.com>.

MFJ-552 CW Interface

MFJ's new *JimHandy*™ interface instantly converts your HT into a CW transceiver! You can enjoy on-the-air CW fun using your HT for only \$59.95!

MFJ's *JimHandy*™ CW interface lets you use your 2 Meter or 440 MHz handheld to practice Morse code on-the-air! You can get your ham buddies together or even your entire club on-the-air and enjoy some fantastic CW fun! It's a great way to practice and socialize at the same time.

Everybody can join in, including No Code Techs, Novices, TechPlus and anybody who wants to upgrade. You simply plug the *JimHandy*™ into your 2-Meter or 440 MHz handheld transceiver and plug in a straight key. Your CW is converted into audio tones that are sent to your mic jack and transmitted by your HT for everyone to copy.

You'll send beautiful sounding code -- the audio is a pure sine wave shaped to eliminate harsh key clicks. You get great sounding sidetone from its built-in speaker and front-panel volume control. This lets you hear what you're sending and develops a good fist.

The Transmit/Receive switch automatically keys your Push-to-talk on your HT as soon as you start sending CW. It keeps it keyed until you've finished sending. Then it returns your HT to receive so you can copy. An adjustable T/R delay knob lets you send fast or slow CW.

MFJ-552 uses a 9 volt battery so you can use it with your HT anywhere. Measures a compact 4W x 11-1/4H x 3-3/4D inches. It includes an open-end patch cable that you can solder your HT connector to. MFJ sells optional pre-wired interface to HT cables for \$14.95. Order MFJ-5024 for Icom, Yaesu, ADI, Radio Shack and compatible HTs. MFJ-5022 for Alinco and Standard HTs; or MFJ-5026 for Kenwood and compatible HTs. MFJ also sells an optional straight telegraph key, MFJ-550, \$7.95.

Anyone can learn the code. There are only 43 different sounds to learn. Make CW fun and exciting -- learn it on-the-air with your buddies and soon you'll be a high-speed CW pro. Get ready! The sunspots are coming and the really exciting stuff is on HF. Order your MFJ-552 *JimHandy*™ CW interface today.

MFJ's *Jimhandy* CW Interface™ comes with MFJ's famous *No Matter What*™ one year limited warranty. That means that MFJ will repair or replace (at our option) your interface for one complete year.

MFJ-1756 6-Meter Vertical

MFJ's new 6 Meter low-angle DX vertical is super quiet... only \$69.95!

MFJ's omni-directional low-angle vertical radiator lets you work plenty of DX in all directions even with low power. It's super quiet -- no static noise -- and it's easy to put up. It fits anywhere!

It uses MFJ's exclusive *GroundIsolated*™ radial system to give you a much cleaner radiation pattern. You'll get more signals at desired low-angle radiation for easy DX. It eliminates common mode current paths and reduces undesirable feedline and supporting structure radiation. It also reduces conducted noise reaching the antenna over the outside of the feedline or the antenna support. MFJ's system ensures that the length of the feedline or support does not change the antenna's resonant frequency or SWR.

The MFJ-1756 is quiet. A DC grounded radiator eliminates noise generated by static. It is easily cut for your favorite part of the 6 Meter band. A rugged adjustable air insulated matching stub lets you obtain a near perfect 1:1 SWR -- a non-adjustable standard ground plane is much less than 50Ω.

MFJ's large diameter radiator gives you wide bandwidth and a heavy duty ceramic insulator gives low RF loss. MFJ-1756 has fiberglass ground isolators, a 55-inch high-strength aluminum radiator and four 60 inch radials. It will mount on any 1 to 1-1/2 inch mast with a single U-bolt (included). Mast is not supplied. It's perfect for your MFJ-9406, MFJ-9606, ICOM IC-706 and other 6 Meter transceivers up to 1000 Watts.

MFJ's low-angle DX Vertical antenna comes with MFJ's famous *No Matter What*™ one year limited warranty. That means that MFJ will repair or replace (at our option) your antenna for one complete year.

MFJ news releases

Humanitarian award nominations open



Nominations are open for the 1998 ARRL International Humanitarian Award.

The award is dedicated to those amateurs who, through Amateur Radio, are devoted to promoting the welfare of mankind. The prize goes each year to truly outstanding Amateur Radio operators in areas of international humanitarianism and the furtherance of peace.

Any radio amateur or group of amateurs worldwide who has provided extraordinary service through their Amateur Radio skills for the benefit of others in times of crisis or disaster is qualified to receive the award.

The ARRL International Humanitarian Award recognizes the hobby's international communication role and that hams regularly help people in need throughout the world. Amateur Radio is one of the few media where average people throughout the world can meet to talk to each other and spread goodwill across otherwise impenetrable political boundaries. The Award is intended to promote positive efforts toward international understanding and peaceful communications.

The award recipient is selected by a committee appointed by the League's President. The committee will accept nominations from a licensed radio amateur, governmental or any other organization that has received the benefits of the radio amateur's extraordinary service. Nominations must include a summary of the nominee's actions that qualify the recipient for the award, and statements from at least two references -- including names and addresses -- for verification.

All nominations and supporting materials for the 1998 award must be submitted in writing in English to ARRL International Humanitarian Award, 225 Main St, Newington, CT 06111 USA. Nominations must be received by December 31, 1998. In the event that no nominations are received, the committee itself may determine possible recipients or decide to make no award.

The award winner receives an engraved plaque and is profiled in *QST*.

The ARRL Letter, 9/17/98

FCC issues errata on proposal

Continued from front page

granted before February 14, 1991, could get examination credit for written Element 3(A). The Errata also add Element 1(B), the 13 WPM code test, to the elements that may be prepared by an Advanced class Volunteer Examiner.

The Errata also correct several apparent typographical errors and make other relatively minor changes to the original NPRM.

The Errata fail to address another discrepancy in the NPRM that was noted earlier by the ARRL. The NPRM gives an applicant who held a Technician license (expired or otherwise) granted before March 21, 1987, examination credit for written Element 3(B). But the proposed rules do not extend similar credit to an applicant who had held a General or higher class license, once the grace period is past.

The FCC Errata document is on the ARRLWeb at

<http://www.arrl.org/news/restructuring/98-143/errata.html>

The ARRL Letter



SSB

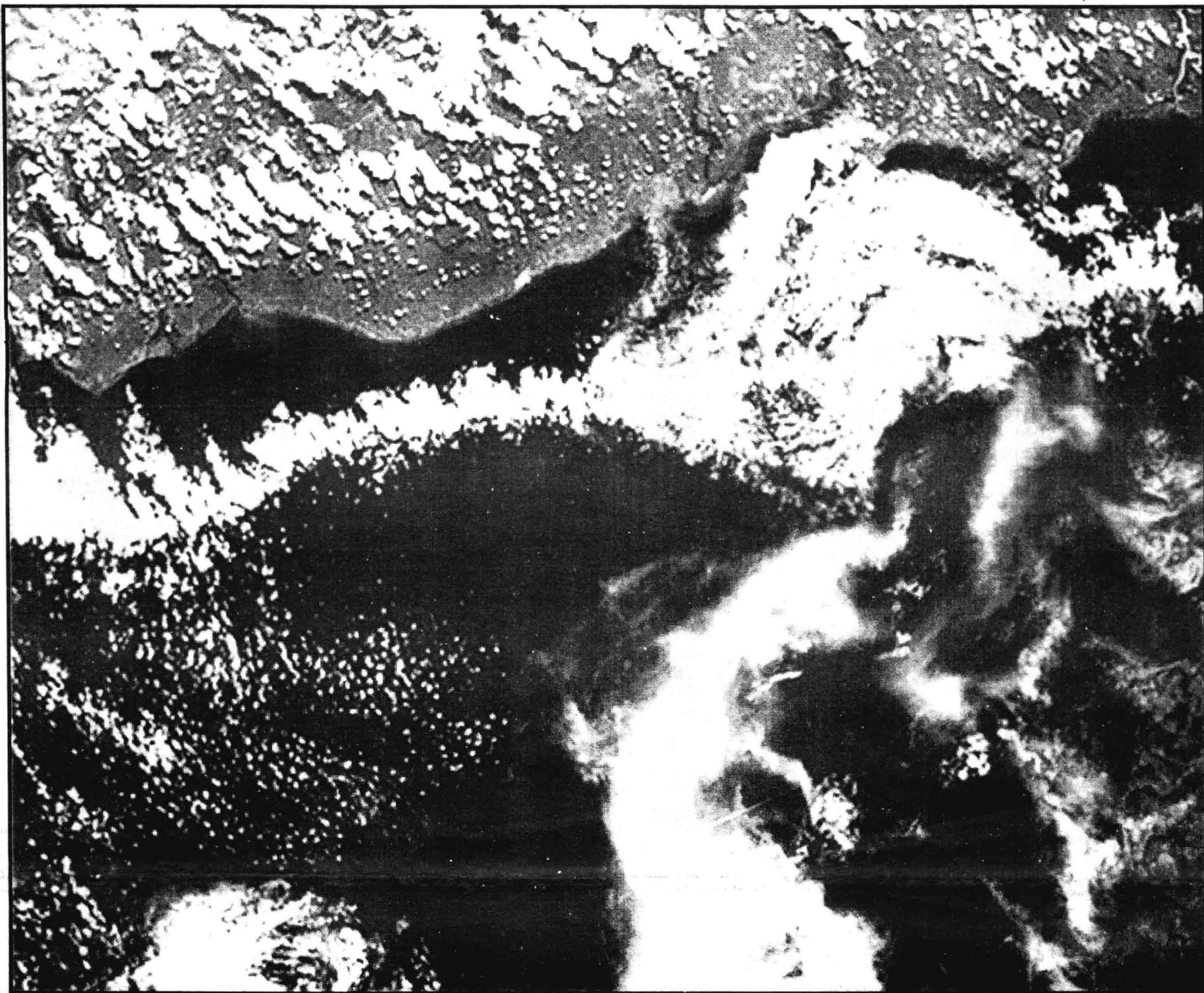
SELL SWAP BUY

OUR WANT ADS GET RESULTS

FOR SALE: Alinco #DJFI 2 meter, spare battery, charger, \$340.00. Vibroplex Deluxe keyer, jeweled bearings, MFJ #484C keyer control, 195.00. MFJ-1278B Multi-mode Data Controller, \$280.00. ADI AR 146 mobile 2 meter radio in box, \$190.00. Ten-Tec Delta II HF with linear amp attachments and mike, \$850.00. Prices are negotiable. Glenn, AA9MT, (920) 684-7096.

ADS IN SELL, SWAP, BUY are run as a service to our loyal readers, and there is no charge. They must be non-commercial. Send to either K9EN or K9ZZ, addresses on page 2. □

TMSAT-1 (TO-3 I) is alive and well



This picture of the Strait of Malacca was taken by TMSAT, launched July 10, 1998 from the Baikonur Cosmodrome. Commissioning of the bird is proceeding nicely, according to Chris Jackson, G7UPN, in the Amsat News Service. The bird carries a multi-spectral imaging system; the photo above was in color, but for printing purposes it is presented here in black and white.

TMSAT's downlink is on 436.923 MHz. According to the ANS story, the bird is expected to be available for "general amateur use" shortly. BSSS does not know what modes will be available now, but will pass that data along if we find it. This image was taken from a Web site.

League says 75 MHz for DSRC is too much

The ARRL says the FCC is proposing too much spectrum at 5.9 GHz for deployment of Dedicated Short Range Communications (DSRC) systems for intelligent

LMCC "Backing off" 70cm request

Continued from front page

withdraw the request to share the 70 cm band with Amateur Radio. The LMCC declined. "The decision was based on the perception that to change the language now could undermine the rest of the petition," Ruark explained. Ruark, the AAA's emergency road service technical communications specialist, said the AAA would be unable to get the LMCC to reverse its position "because there is not enough support to win a vote on the matter."

But Ruark said it was his understanding that the LMCC "would not continue to actively seek access to the amateur radio spectrum, and would forfeit that language during FCC negotiations in exchange for more important spectrum allocations."

A copy of Ruark's letter to Doan is available on the ARRLWeb page, <http://www.arrl.org>.

The ARRL Letter

transportation system (ITS) applications. The League's comments follow a June 11 Notice of Proposed Rulemaking (ET Docket No 98-95) in which the FCC proposed setting aside 75 MHz--5.850 to 5.925 GHz for use by ITS on a coprimary basis. The Amateur Service has a secondary allocation at 5.650 to 5.925 GHz, sharing with government radars and nongovernment fixed satellite service uplinks.

The League said the FCC should compensate for the DSRC incursion by elevating the remaining Amateur and Amateur Satellite allocations at 5.650 to 5.725 and 5.825 to 5.850 GHz to nongovernment primary "to insure against future preemption by nongovernment services with higher allocation status."

The ARRL said it's not apparent from the FCC's NPRM that 75 MHz of spectrum is necessary. The DSRC allocation at 5 GHz in Europe is only 10 MHz wide, the League pointed out, and the FCC Notice does not account for the disparity "between that bandwidth and the claimed need for 75 MHz for unspecified future DSRC applications." The League said the Commission ought to explore the opportunities of frequency reuse and the availability of the 902-928 MHz band for some

DSRC functions.

In earlier comments, the League questioned whether the 5.9 GHz band was appropriate for DSRC and urged the FCC to look into frequencies above 40 GHz, where DSRC systems could avoid interference from other users.

The League also recommended that the Commission mandate prior coordination between ITS America (a nonprofit ITS promotional organization) and the League or restrict DSRC facilities to those using "listen-before-transmit protocols and frequency-agile transmitters with roaming channel selection."

Possible ITS applications include various highway safety systems, including traffic control, automated roadside safety inspections, enroute driver information systems, and systems where DSRC-equipped vehicles could be equipped to more quickly detect traffic congestion and dispatch emergency personnel or take other actions.

ITS DSRC transmissions would be "narrowly focused and rapidly dissipating signals," according to ITS America. The FCC has proposed a maximum of 30 W EIRP for DSRC systems.

A copy of the League's comments is available at

<http://www.arrl.org/announce/RM-9096-cmt.html>.

The ARRL Letter

Arizona hams help locate lost toddler

An Arizona toddler is safe, thanks in part to help provided by the Cochise County ARES/RACES unit. The team was activated around 8:45 p.m. on September 8 to assist the Sheriff's Office Search and Rescue unit in locating the lost 2-1/2 year old boy who had wandered away from his home earlier in the evening.

The unit deployed the County Emergency Response Van (ERV) to an area near the Cochise/Graham county line north of Willcox, Arizona, to assist in the search. Elements from several other public safety units -- more than 75 people in all -- also turned out.

Bob Hollister, N7INK, and Ron De-Willers, W1YYO, spent the night manning radios in the emergency response van and helped to keep track of the search teams as the vigil wore on. Just as the ERV relief team showed up to take over the day shift, the little boy was located by a county search-and-rescue dog team some two miles from his home in a cornfield. "Other than being tired, hungry, a little dehydrated, and thoroughly intimidated by the experience, the young man was fine," reports Arizona Section Manager Cliff Hauser, KD6XH. The youngster had spent about 15 hours in the fields trying to find his way back home.

Hauser said that eight amateurs were involved in the search effort.--thanks to Arizona SM Cliff Hauser, KD6XH

The ARRL Letter

PARTICIPATING CLUBS AND ORGANIZATIONS

Wisconsin Valley Radio Association

Kim Kunze, N9SDL, Secretary

P.O. Box 363 • Wausau, WI 54402

Six Meter Repeater: 51.19 Input/52.89 Output

MEETING MINUTES September 1, 1998

Meeting was called to order by N9SDI. Members present were: N9NMH, N9IAB, N9LIA, N9TTA, N9MEA, KB9RXA, KB9DED, KB9FRB, KB9DZG, W9VHA, W9WW, N9NRA, N3FDE, KB9MCZ, K9UTQ, KA9PML, KC9NW, KB9RXB, N9NRC, K9JPS, K9QM, and N9SDL. Minutes (Published in BSSS) Approved: W9WW and N9TTA. Treasurer's report, approved: N9NRA and N9TTA.

Upcoming events: Gear Grinder Bike Race - September 13. Will be looking for about 15 hams to provide communications. If you can help out, please contact Jim, N9SDI.

The BSA Fall Camporee is being held October 9-11 at the Council Grounds Campground in Merrill. Jack, N9LIA, is taking names of those able to set up the club station Friday evening and demonstrate ham radio communications on Saturday.

Old Business

Status of 6M repeater - (Mark, N9MEA) Everything all set; got the antenna from WX9W but still need some brackets for mounting to tower.

Pictures of the 45/90 Special Event

and Field Day were passed around and KB9MCZ offered to put them in a album for use in showing what type of activities take place during such events. The club will cover the costs of the photo holders for the album.

New Business

Club auction at the October meeting will be held if we can determine if there will be enough stuff to auction off. Please get your lists of items to one of the board members, as this will determine if we have it or not.

Discussion took place regarding having a ham fest next August because there aren't any others in the entire state for that month. Need a chairperson to organize the event.

Upcoming programs

October 6th meeting: Possible Club Auction.

Adjournment: N9NRA and KB9RXA.

The program was by Gene Santoski, K9UTQ on traffic handling. It was a great program and very informative. Thanks, Gene, for your time.

Respectfully submitted:
Kim Kunze, N9SDL

Wisconsin Nets Association Ltd.

Art Evans, KA9KLZ, Secretary

213 N. Jefferson • Cuba City WI 53807-1558

WISCONSIN NETS

Net	WNA	Freq.	UTC	CDT	Manager
BWN	Yes	3985	1200	0700	W9RCW
BEN	Yes	3985	1800	1300	KE9VU
WSBN	Yes	3985	2330	1830	WB9WHQ
WNN	Yes	3723	0000	1700	KB9OCZ
WSSN	Yes	3645	0030	1930	N9BDL
WIN/E	Yes	3662	0100	2000	WB9ICH
WIN/L	Yes	3662	0400	2300	W9UW
RCRA	No	01/61 (Mondays CDT)	0030 (Menomonie Area)	1930	KA9OMC
Gr. Bay	No	72/12 (Green Bay Area)	0245	2145	WB9NRK
ARES	No	4.65/5.25 (South East/South Central Wisconsin)	0200	2100	
RACES	No	3993.5 (LSB Sunday)	1400	0900	WA9OAY

Wisconsin Nets Associated, Ltd. Wisconsin Rapids Meeting August 23, 1998

Chairman Carl Plotz, Jr, WB9JSW, called the meeting to order at 1:20 p.m., August 23, 1998 in Hanson Park. The following members and guests were present:

N9UAR, K9UTQ and XYL, KA9BAE, WB9JSW, N9FWG, WB9NRK and XYL, N9BDL and XYL, KA9BAC, W9CBE, N9TSO, K9FHI, N9ZTY, W9RCW, KF9QA, W9IHW and XYL, W9UW, and KA9KLZ.

The Chairman called for the approval of the minutes of the previous meeting as published in BSSS. A motion was made and seconded to approve the minutes as published. Motion carried.

The Chairman then called for the treasurer's report. WNA Treasurer Bob Foster, N9UAR, submitted the following report:

Balance on hand 6/7/98 \$323.22

Income 37.20
Expense 25.20

Balance on hand 8/23/98 \$335.22

Bob noted that the beginning balance was corrected to reflect the actual bank balance. The chairman called for the approval of the treasurer's report. A motion was made and seconded to approve the treasurer's report. Motion carried.

ARRL Officials Reports

SECTION MANAGER (SM) Roy Peterson, K9FHI, reported that he would serve one more term as SM, so we should start thinking about someone else for the job.

Roy also reported that more net control stations are needed on 9RN.

SECTION EMERGENCY COORDINATOR SEC John Leekley, WB9SMM, was not present.

SECTION TRAFFIC MANAGER (STM) Art Evans, KA9KLZ, reported that the nets were doing well. Art stated that a delegate was needed for the WNN. Lee, N9BDL, said he would mention to Pat, KA9OCZ, WNN N/M, that he should appoint a net delegate.

BULLETIN MANAGER (BM) Dale Johnson, WB9NRK, reported that he is looking for more Official Bulletin Stations. Dale also said he would like to get reports from the present OBS's.

Net Manager Reports

BADGER WEATHER NET (BWN): N/M Rick Elsener, W9RCW, reported that the net was doing good. Rick thanked all of the people who held the net together while he was sick. Rick said he has been ill three times and appreciated the effort of Carl, Lew, and all of the others who kept things running smoothly. Rick said that there are two new WX pick up stations now, K9RTB and K9GU. Rick said more pickup stations are needed to spread the work around a little.

Rick reported that the net is very important to the Weather Bureau.

BADGER EMERGENCY NET (BEN): N/M Wayne Schanke, KE9VU, was not present. BEN Delegate Art Evans, KA9KLZ, reported that the BEN is doing well, with check-ins averaging 17, traffic averaging 3 messages per session. The net needs more check-ins and traffic. A net control station is needed for Sunday and more 9RN reps are needed.

WISCONSIN SIDEBAND NET (WSBN): N/M Dan Novotny, WB9WHQ, was not present. Dan gave his report to Carl, WB9JSW, who relayed it to the meeting. Carl reported that check-ins are up and traffic is down for the WSBN. One new WSBN member is reported, K9WVM.


Delegate Bob Foster, N9UAR, remarked that the net needs more traffic.

WISCONSIN NOVICE NET (WNN): N/M Pat Carlson, KB9OCZ, was not present. Lee Andreas, N9BDL, reported that the net was doing well, with KB9KEG as a new net control station. Lee said he would mention to Pat that he could appoint a delegate for the WNN.

WISCONSIN SLOW SPEED NET (WSSN): N/M Lee Andreas, N9BDL, reported that the WSSN is on the air every day at 6:30 pm local time on 3645 kHz. Lee said that there were check-ins from other states and conditions were good at net time. Lee also reported that traffic was up a little on the net.

WISCONSIN INTERSTATE NET - Early (WIN/E): N/M Larry Guthu, WB9ICH, was not present. Hale Blakely, W9CBE, reported that the net was going good with all net control slots filled, and only Thursday open for 9RN reps. Hale also reported that traffic was up some.

WISCONSIN INTERSTATE NET - Late (WIN/L): N/M Ron Tlachac, W9UW, reported that WIN/L is doing great. Ron reported that the nets are averaging 6.2 check-ins, 1.4 messages, and 9.8 minutes per session. Ron said the net was



SHEBOYGAN

County Amateur Radio Club

★

Steve Elsold, AA9SJ, Secretary
2220 N. 20th Street • Sheboygan WI 53083

2-Meter Repeater: 147.06 Output

The September meeting of the Sheboygan County Amateur Radio Club was called to order by Larry, WB9FXQ, at 7:05 p.m. local time. There were 12 members present and 3 guests from the ManCoRad club in attendance at the meeting. The SCARC meets every second Tuesday of the month at the Red Cross building, 2032 Erie Ave. Sheboygan. Again this month the meeting was moved to the K.W. Muth conference room due to flood damage at the Red Cross building.

Treasurer's report was given by Steve, N9TRK. Receipts showed there is \$1514.55 in our account. BSSS renewal is next month and there are several members who have not paid their dues yet. Your name will not be on the subscription list if the dues are not received. Steve is also compiling an e-mail address list. To be on the list contact Steve with your e-mail address as soon as possible.

Art, K9XJ, gave a short DX report, commenting mostly on upcoming DX-peditions this fall. He also displayed an article that was reprinted from the *Wall Street Journal*, 7/31/98, accounting DX-peditions and world travel.

September 12th, from 8 a.m. - 3 p.m., is the Old Plank Trail Health Classic. We have the minimum 6 operators, but more are always welcome. Contact either Art, K9XJ, or Mike, K9SJ, if you can assist with communications.

On September 26, the SCARC has been invited to set up a demonstration station at the Boy Scout, Bay Lakes Council, meeting in Oshkosh at the EAA grounds. The local VE team will also be there administering tests to the scouts. Contact Penny, N9TCF, if you are interested in helping.

We are looking for someone to maintain the club packet BBS station. A location to erect an antenna and room for the equipment has been found, but the need for an operator to maintain the station and keep the information current is needed. Any volunteers??

Up coming meetings of interest:

October, TNC kit building
November, Normal club meeting will be held completely on the air.
February, Valentines dinner

Mike, K9SJ, announced that his DX uplink is again back on the air. Use 145.510, and K9SJ-6. Then follow instructions on screen. Mike also has some equipment for sale from a local silent key. Contact Mike for list and prices.

The ManCoRad Radio Club has invited the SCARC to a picnic on October 3 from noon-6 p.m. The location is Lincoln Park,

Continued on page 11

Continued on page 11

Wisconsin Nets Association

Continued from page 10

passing from 35 to 50 messages per month. Ron reported that conditions have been bad a few times but overall, things were pretty good.

Election of Officers

Chairman Carl Plotz reported that officers terms were up as of this meeting. The following WNA members were nominated for office during the 1998-1999 term:

Chairman: Ron Tlachac, W9UW
Treasurer: Gene Santoski, K9UTQ
Secretary: Art Evans, KA9KLZ

With no opposition on any of the offices, the slate of candidates were elected by acclamation. Congratulations to the new officers and thanks to the ones who are leaving office.

Old Business

The Chairman inquired how the WNA promotion was doing. Gene, K9UTQ, reported that he made a presentation at the Junction City Hamfest in June, and was going to do a presentation in Wausau in September. Gene said he would do some articles for BSSS also.

The Chairman then inquired as to how the Web Page was doing. Art, KA9KLZ, reported that the WNA web page was up and running but needs someone to main-

tain the page.

The Chairman then inquired how the program to make a roster for the WNA nets was doing. WNA Secretary Art, KA9KLZ, reported that he has received rosters from the net managers of WSSN, WIN/E, and WIN/L.

New Business

There was much discussion on the ARRL proposal to restructure the amateur licenses. Some of the subjects discussed was how this would affect the CW nets, possible consolidation of the CW training nets, possible CW speed changes in the nets, and a possible increase in the people who would have voice privileges in the 75 meter bands. The consensus was that the WNA will have to change if there is a restructuring of the amateur licenses.

Rick Elsener, W9RCW, stated that he is the Official Observer Coordinator, and if any of the members have any problems with interference to let him know. There was a discussion on the OO corps and some of the problems they face.

The outgoing Chairman, Carl Plotz, WB9JSW, set the date for the next WNA meeting, which will be an on-the-air meeting, for December 12, 1998, immediately following the Badger Emergency Net, at about 12:30 p.m., on 3985 kHz.

With no further business at hand, the chairman called for a motion to adjourn. A motion was made and seconded to adjourn. Motion carried and the meeting was adjourned at 2:34 p.m., August 23, 1998.

Respectfully Submitted,
Art Evans, KA9KLZ
WNA Secretary

WISCONSIN NTS TRAFFIC REPORT August 1998

There was a slight decrease in both check-ins and traffic in August. With all nets reporting, 3027 stations passed 2090 messages in August. BWN/1667, BEN/90, WSNB/67, WNN/25, WSSN/24, WIN-E/125, and WIN-L/48.

Nine stations had traffic totals in excess of 100, six of whom made Brass Pounders League. (BPL) The stations are: WB9JSW/794 (BPL), K9JPS/790 (BPL), K9RTB/525 (BPL), W9CBE/523 (BPL), K9GU/512 (BPL), W9RCW/436 (BPL over 100 originations/deliveries), WB9-YPY/420, W9YCV/157, and N9KHD/133.

Twenty-eight stations submitted Station Activity Reports, and thirteen stations submitted Public Service Honor Roll Reports.

I mail my reports to League Headquarters on the 7th of the month. That makes

the deadline for reports the 6th. I can accept reports until I start printing them up for mailing. If you can catch me on the BWN on the morning of the 7th all would be well.

Hale Blakely, W9CBE, Asst. STM will also accept reports and forward them to me. Hale covers most of the CW and SSB nets so there is someone on almost every net to take reports.

Reports can also be sent VIA packet or e-mail.

My packet address is:
KA9KLZ@KC9KQ.WI.USA.NOAM
My e-mail address is:
aevans@mhtc.net

Thanks to all stations who participate in the Wisconsin nets. You are the nets and Wisconsin nets are the best. 73.

Submitted by:
Arthur A. Evans, KA9KLZ
Wisconsin Section Traffic Manager
September 7, 1998

WNA N/Ms, Delegates and ARRL Officials

ARRL Officials

SM Roy Peterson, K9FHI
SM/A Gene Santoski, K9UTQ
SM/A Hale Blakely, W9CBE
STM Art Evans, KA9KLZ
SEC John Leekley, WB9SMM

WNA Officials

CHMN Ron Tlachac, W9UW
SECY Art Evans, KA9KLZ
TRSR Gene Santoski, K9UTQ

Badger Weather Net

N/M Rick Elsner, W9RCW
Del Lew Sheerar, K9JPS
Del Carl Plotz, WB9JSW
Del Gus Bonow, W9IHW

Badger Emergency Net

N/M Wayne Schanke, KE9VU
Del Art Evans, KA9KLZ
Del Fred Becker, W9KKM

Wisconsin Sideband Net

N/M Dan Novotny, WB9WHQ
Del Roy Pedersen, K9FHI
Del Gene Santoski, K9UTQ
Del Bob Foster, N9UAR

Wisconsin Novice Net

N/M Pat Carlson, KB9OCZ
Del

Wisconsin Slow Speed Net

N/M Lee Andreas, N9BDL
Del Andy Borg, N9KHD
Del Keith Shilhavy, KY9P

Wisconsin Interstate Net/Early

N/M Larry Guthu, WB9ICH
Del Hale Blakely, W9CBE
Del Les Peterson, W9YCV

Wisconsin Interstate Net/Late

N/M Ron Tlachac, W9UW
Del Steve Franzen, N9CK

Sheboygan County Amateur Radio Club

Continued from page 10

Cabin #1, Manitowoc. All you need is a dish to pass. There will also be a T-hunt later in the afternoon.

Steve, N9TRK, gave a presentation on the F.I.S.T. CW club. This organization was formed to help Novices and experienced hams improve their accuracy in CW. Formed late in 1987, there are now chapters throughout the world. There are contests involving working other FIST members, and awards for the most contacts. If you are interested, contact either

Steve or look at www.FISTS.org on the InterNet for more information.

Again we wish to thank Mike, K9SJ, for the refreshments and his boss, Mike Muth, for the conference area. Meeting adjourned at 8:25 p.m.

Net schedules

8 p.m. Monday nights, SCARC Fun Net, 147.06 PL 107.2, +.

Traders Net - Following the Monday night net on the first Monday of each month.

Respectfully submitted:
Steve Eisold, AA9SJ

OFFICIAL PUBLICATION OF CENTRAL WISCONSIN RADIO AMATEURS, LTD.

At University of Wisconsin, Stevens Point



WB9QFW 2-Meter Repeater 146.07-.67 and Club Station

249 Georgia Street North • Stevens Point WI 54481-1040

September Meeting Minutes

Wednesday, September 9, 7:30 p.m. the meeting was called to order by President Mike Pagel, K9UW.

The first item on the agenda was a video program, presented by Mike Pagel, dealt with old radios.

The treasurer's report was given by Mike and a motion by Mary Eiden, KG9-OK, and a second by Gene Kroll, KE9-MA, to accept the treasurer's report carried.

Gene Hamus, N9GEP, moved to accept the secretary's report and the motion was seconded by Jan Rydberg, KB9RUJ; motion carried.

Repeater Reports: Mike Pagel reports that the .670 repeater is operating satisfactorily. There is no report available on the .985 machine at this time.

UWSP has re-evaluated their space needs, and that results in moving the club station. The station will remain in the Stein Building but moved to another room. Mike Pagel, K9UW, asks for volunteers to help clean, organize and pack the electronic components to facilitate the move. The scheduled date is Thursday, September 17, at 7:00 p.m.

Dave Tamres, KB9IIF, spoke on the progress of implementing changes to our constitution and obtaining non-profit status. Non-profit status progress has been delayed because of governmental snafu.

Joe Larson, N9JW, reminds us that he will begin teaching Tech class beginning Wednesday, September 30 at 7:30 and continuing for ten weeks with testing on December 5, 1998. It was approved that Joe purchase manuals to cover the class, which will be taught in the UWSP Science Building.

Congratulations to Mary Eiden, KG9-OK, on her upgrade to Advanced Class. And welcome to Kris Schippe, KB9-

LYT, a new member and student at UWSP.

Election of Officers: The following members have been elected for the coming year.

Al Mallek, K9WVM, President

Jerry Fadness, W9GF, Vice President

Mary Eiden, KG9OK, Secretary

Joe Omernik, N9CGV, Treasurer

Kathy Mallon, KG9NX, Activities Chairperson

Jim Tuszka, N9MEB, Engineer, 670 repeater

Ron Howe, NJ9H, Engineer, 985 repeater

Motions to adjourn by Deb Kroll, second by Gene Kroll carried; meeting adjourned at 8:40 p.m.

Respectfully submitted,
Al Mallek, N9WBS, Club Secretary

Attendance

Kris Schippe	KB9LYT
Mike Eiden	WD9JID
Mary Eiden	KG9OK
Mike Peters	W9CO
Kathy Mallon	KG9NX
Jerry Fadness	W9GF
Joe Omernik	N9CGV
Allen Taylor	KF9WR
Gene Hamus	N9GEP
David Tamres	KB9IIF
Jan Rydberg	KB9RUJ
Mike Pagel	K9UW
Gene Kroll	KE9MA
Deb Kroll	N9EIL
Al Mallek	N9WBS

To K9JPS

*Backside optitis is not a big deal;
Your doctor assures us that you will probably heal.
The success of the procedure is somewhat in doubt,
But that is not a reason for you to pout,
For the good things in life usually work out.*

*Your joyous wit and light-hearted prattle
Make our doldrums want to skedaddle.
Roses are red and violets are blue.
We are at a loss to know what to do.*

*Al'tho it it definitely was not our wish
You now understand about a pain in the tush.
So please hurry up and be on the mend.
The Weather Net misses our jovial friend!*

Rich and the Badger Weather Net gang

Mancorad Radio Club

Mary Langer, KB9GOY,
Secretary

P.O. Box 204 • Manitowoc, WI
54221-0204



2-Meter Repeater: 146.01 Input/146.61 Output

MANCORAD MINUTES September 9, 1998

The ManCoRad club resumed its regular meetings after having a summer break. The meeting was called to order by President Roger, W9NPX at 1735.

The minutes of the May meeting were approved as printed in the "Badger State Smoke Signals". The motion was made by Glenn, AA9MT and seconded by Dick, N9QFY.

The treasurer's report was read by Glenn, AA9MT and a motion was made by Ken, K9HAG and seconded by Oran, N9VIA.

OLD BUSINESS

We held our annual sub-event on August 15 on board the USS Cobia docked in Manitowoc. The event went from 9:00 to 3:00 as the bands were very good. Fred, W6BSF, reported they had 220 contacts, 147 on 20 meters and 173 on 40 meters. We would like to thank Fred, W6BSF, and Eric, AF9J, for organizing this event, and the following for their help in making it go: KB9INK, KB9NTL, N9QFX, W9NPX, N4WKG, N9WUN, and N6JSX. W6BSF has sent a certificate and a QSL card to all who responded. There are plans to do this again next year.

Jerry, K9JHK, from Sheboygan has put this on the Web with pictures. We would like to thank him for all his work. We also had coverage in the Manitowoc "Lakeshore Chronicle". Syd Herman did a nice write-up and photo and it was featured on the front page. Jan, N9IQZ, is going to make up a nice certificate for him in appreciation for doing this.

NEW BUSINESS

The club family picnic will be held October 3 from 12:00 to 6:00 at Lincoln Park Cabin 1. All you need to bring is a dish to pass and your beverage. The rest will be provided by the club. After we eat there will be a T-hunt at 1:00 with prizes. The Sheboygan club is invited to join us. September 26 is the cut-off date for letting

Fred, W6BSF know if you will attend. Jan, N9IQZ has volunteered to send post cards to members informing them of the picnic. Hope to see everyone there. The zoo is nearby and there is plenty to do for the children.

We have a new upgrade in the club. Paul Welnicke, N9QFX, has passed his Extra class and his new call is AA9WI. Congratulations, Paul!

Keep in mind elections are coming up in November. We need three people for the nominating committee in October. Please come to the meeting and take part. Glenn, AA9MT, informed us he will not take treasurer again due to health reasons.

Clancy, K9WIX, got an e-mail from Nancy Crowley, Manitowoc County Emergency Management, thanking the hams for the weather spotting they did during our recent severe weather on August 23. We had reports that some people turned off the radio and were listening to 146.61 because they knew just what was happening.

The motion to adjourn was made by Erv, W9OMO, and seconded by Chuck, W9GXD, at 1826.

*Submitted for approval,
Mary Langer, KB9GOY
Secretary*

Meeting Attendance

Glenn	AA9MT
Mary	KB9GOY
Roger	W9NPX
Fred	W6BSF
Charles	W9GXD
Ervin	W9OMO
Dick	N9QFY
Janice	N9IQZ
Ron	WS9X
Denise	N4WKG
Dave	WN9Q
Lyle	WB9VTM
Oran	N9VIA
Clancy	K9WIX
Ken	K9HAG
Chuck	N9WUN
Paul	AA9WI

Wisconsin Association of Repeaters

Mark Heimmermann, KF9CS, Secretary
1523 E. Moonbeam Tr. • Appleton, WI 54915



Meeting was called to order by the Chairman, Gary Bargholz, at 1:05 p.m. It was held at the Chalet Motel in Mequon.

Introduction of members and guests:

Mark Heimmermann, KF9CS
Ed Rate, AA9W
Dave Barrow, N9UNR
Nels Harvey, WA9JOB
Gary Bargholz, N9UUR
Jeananne Bargholz, N9VSV
Tom Waldschmidt, N9LZW
Warren Schall, K9IZV
Joel Eschmann, K9MLD
Dan Bolander, WB9TYT
Dave Knaus, WA9POV
Ray Meyer, N9PBY

There were no additions or corrections to the minutes. The minutes of the last meeting were approved as printed in the newsletter.

Treasurer's report: The current account balance is \$3275.95. This includes payment of the September newsletter and MACC dues. Dave moved that the Treasurer's report be accepted, subject to audit. It seconded and accepted by the

members present.

Newsletter report: All the manual labor of the newsletter is now handled by a commercial business. It prints, folds, stamps and mails all the newsletters. WAR sends over 375 newsletters to its members. The cost of the added support is \$75. Dave made the motion "Continue using the printer for publishing the newsletter as long as the treasury is healthy". The motion was seconded by Nels and approved by all members present. This allows Ray to spend his time on editing the newsletter.

Ray requires all articles for the newsletter be submitted one month before the following meeting. That means all articles must be submitted to Ray by November 12 for the meeting this December.

Dave, N9UNR, volunteered to research the cost savings of having the newsletter pre-sorted.

Coordinator's Report: Dan listed another group of new frequency coordinations and some old frequencies about to be de-coordinated. When a repeater system is purchased from an individual the fre-

Continued on page 13

The Racine Megacycle Club

Club Station W9UDU • Racine, WI
Mary Urban, N9ZWE, Secretary

c/o RMC • P.O. Box 3 • Racine, WI 54301-0003

e-mail: w9udu@wi.net • Web: <http://www2.wi.net/~hamradio/>

Voice mail: (414) 552-6RMC

ARRL Affiliated

Providing communications for
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MEETING MINUTES August 10, 1998

The August 10, 1998 regular membership meeting of the Racine Megacycle Club opened at 7:34 p.m. at the American Red Cross Building. President Rees Roberts, K9UUT, and Secretary Mary Urban, N9ZWE, were present.

Secretary Mary, N9ZWE, read the minutes of the July 13, 1998 regular membership meeting. Ken, N9WHR, made a motion to accept the minutes as read. The motion was seconded and approved.

Treasurer Pro-tem Greg, KB9RMA, read the treasurer's report. Ken, N9WHR, made a motion to accept the report as read. The motion was seconded and approved.

Due to the resignation of Treasurer Dave, AA9HL, a special election was held. Treasurer Pro-tem Greg Holding, KB9RMA, was nominated by the board. Bonnie Haney, WB9ZKX, was nominated from the floor. A motion was made by Lee, N9VNU, to close the nominations. It was seconded and accepted. A vote was taken by written ballot. Bonnie Haney, WB9ZKX, was elected as the new treasurer.

V.P. Bob, W9EH, moved that the board thank Treasurer Pro-tem Greg, KB9RMA, for his service during this transition. Bob, W9EH, made a motion to thank Greg Holding, KB9RMA, for his service as treasurer pro-tem during this difficult time for the club. The motion was seconded and approved.

Bob, W0WLN, made a motion to thank Dave, AA9HL, for his many years of service to the club. It was seconded and approved.

Greg, KB9RMA, announced that the club has a new checking and savings account effective July 21. The club also has a safety deposit box. The keys are held by President Rees and Secretary Mary.

Mary, N9ZWE, gave a History Committee report. Spence, W9LDH, wrote to the ARRL requesting information about our club's history. He received copies of the paper work from 1948 requesting affiliation with the ARRL. He wrote a report covering 1948-1954 and included various documents. Mary also received the

original Articles of Incorporation and Amendment. They will be put into the safe deposit box. Anyone holding club documents should turn them in.

Dan, KA9OIL, gave a Fox Hunt report. The next hunt will be at 7:30 p.m. on Friday, August 14, at Regency Mall.

OLD BUSINESS

Bill, W9OVZ, spoke about the changes in Amateur Radio over the years. He also spoke of the low membership in the club.

Rees, K9UUT, faxed a letter to the IRS on August 6 withdrawing our application for the 501(c)3 tax status.

Hamfest Committee chair Rob, KF9-ZT, submitted a report on the recent hamfest. He has offered to chair the 1999 hamfest.

NEW BUSINESS

Pete, WA9KFL, has old issues of QST to donate to anyone who wants them.

Rees, K9UUT, announced that the club now has an extended voice mail box. The number is 552-6RMC.

Bob, W9EH, gave a report on the Amateur Radio restructuring proposal.

Larry, WA9JMO, gave a report on the upcoming class. It will start Sunday, September 20 and last 12 weeks. He will try to acquire audio tapes for students with physical disabilities.

Rees, K9UUT, announced that he will create a committee to study the feasibility of merging the Megacycle and Lakeshore Repeater clubs.

The Web site was recently moved from one server to another which has slowed it down. He is considering getting our own domain name.

Ken, N9WHR, made a motion to adjourn the meeting at 9:08 p.m. The motion was seconded and approved.

A drawing was held and Dan, KA9-OIL, and Tony, N9ZWM, each won 2 Woodstock Hamfest tickets and Greg, KB9RMA, won 2 Grayslake Hamfest tickets.

Jonathan, KB9PUF, gave a demonstration on bicycle mobile radio communication.

Yellow Thunder Hamfest/1977



During the 1970s, the Yellow Thunder ARC of the Baraboo area sponsored a hamfest in Lake Delton, complete with forums and programs followed by a super dinner. In this 1977 photo are Sue Miller, W9YL; Don Miller, W9NTP (ARRL Central Division Director); Roy Pedersen, K9FHI, Wisconsin Section Communications Manager; Bob White, W1CW, who headed ARRL's DXCC Branch, and Ken Ebner, K9EN, Central Division Vice Director.

Wisconsin Association of Repeaters

Continued from page 12

quency pairs do not come along with the deal. Some areas of the state have a waiting list for available frequencies. Please contact Dan for any coordination changes. He will work with you to find a solution for the whole amateur community.

Any repeater systems that have no contact with WAR for over two years can expect de-coordination of their frequencies.

The WAR web page has two listings for Wisconsin's repeaters. One is sorted by city and the other sorted by frequency. Please check the newsletter or web site to verify the repeaters in your area are current. If one is delinquent, poke the trustee with a stick to get things moving.

There are two parts to the forms in the March newsletter. One part is used by the secretary to enter the snail-mail address for the newsletter and the second part is for coordination. It is important that all parts be sent to the treasurer Jim Sheetz, K9OQO. Jim deposits the money in the WAR account and then forwards the information to the secretary. The secretary updates the mailing database and forwards the information to Dan for coordination updates.

For a new coordination please contact Dan or get the proper form off the web page.

MACC/NFCC Report: The election results for NFCC are:

Dick Isely, W9GIG	105 votes
Owen Wormser, K6LEW	102 votes
Dave Shiplett, AC4MU	75 votes

One of these gentlemen will become chairman. The NFCC board will determine who becomes chairman.

Nels is chairman on an NFCC committee to draft language for a petition of rule making. The NFCC wants repeater coordinated to become mandatory. The document is still a work in progress. The committee has adopted a wait and see attitude until the other FCC rule makings and congressional bills have matured. The draft will be sent via the NFCC remailer for review upon its completion.

Chairmen's Report: Using the bulk emailer is working great. The feedback was very encouraging. Only 40 of the 320 addresses bounced. We are investigating attaching the newsletter to the email. Another suggestion is to attach the meeting minutes to the email. We are also looking into a emailer or newsgroup to handle questions on WAR policy, procedures or technical questions.

Things with LMCC may have take a turn for the better. The LMCC is composed of groups of partners and some of them have very strong options against using any of the amateur's spectrum. The three partners are the American Automobile Association (AAA), Association of Public Safety Communications Officials - International (APCO) and the National Telecommunications & Information Administration. The wording of the petition will not be changed but the thought is the LMCC will use the amateurs' spectrum as a token gesture to acquire more spectrum elsewhere.

Six meters is a hot bed of discussion. A national standard for spacing is being considered. Some of the proposed splits include 1.7 Mhz, 1.6 Mhz, 1.0 Mhz and 0.5 Mhz. Currently MACC is in favor of a 1.7 Mhz split.

WAR has been requested to give priority to more progressive technologies such as digital, narrow band, trunking and spread spectrum. After some discussion, it was decided there is little demand for such operations at this time. Any such requests will be handed on a case by case bases and subject to the same procedures as all other requests.

Old Business: No old business discussed.

New Business: For all Dan's effort it was decided to double his current salary. The next time Dan will receive two zeros (00) instead of one (0)... There was a lot of discussion on emailing the newsletter, reducing dues for email only membership and methods to combine all the WAR databases. No conclusions were formed. Dave, N9UNR, will investigate merging the databases into a central database and providing distributed access to WAR offices.

The next WAR meeting will be held in Neenah at Gulliver's Grill & Bar on December 12, 1998. Take highway 41 to Neenah. Take the Breezewood exit and head west. The restaurant is northwest of the intersection between Breezewood and US 41.

The meeting was adjourned at 2:43.

Respectfully submitted
Mark Heimmermann
(KF9CS)

*Wisconsin Association of Repeaters,
Secretary*

Taylor County Area Amateur Radio Club

Tom Hrdina, N9GEN, President

2373 Willow Avenue • Medford WI 54451

At press time, nothing had been received from the Taylor County Area Amateur Club for publication.

Washington County Amateur Radio Club

Tom Waldschmidt, N9LZW,
Secretary
465 Elder Lane
Allenton, WI 53002-9799

Club Repeater: 146.73 MHz

<http://www.nconnect.net/~WCARC>

Secretary Tom Waldschmidt's many and varied duties didn't allow time enough for him to ship any data to BSSS for publication. We hope to see him back in November.

On the street

Ten-Tec's PC-controlled RC-320 receiver is on the street. The model RX-320 is the first "black box" receiver from a US manufacturer. Carrying a price tag of \$295, the RX-320 offers reception up through HF.

The ARRL Letter

Quarter Century Wireless Association Southeastern Wisconsin Chapter 162

Larry McCalvy, WA9JMO
5400 Six Mile Road
Racine, WI 53402



Fern Fisher, W9LCJ, an avid fisher-person, set the fishing communication modes a glowing early on the third Saturday in September. As Fern sat, early in the morning, on the comfortable deck chair of one of Racine's more elaborate fishing boats, line trolling in the wake, the spinner on her fishing rod began screaming in protest as the line departed with the speed of light. With the skill developed over the years, Fern set the hook and began a battle, that up to the last moment, either side could have won. With great skill, the waters of Lake Michigan, were separated from a 27-pound, 36-inch, Chinook Salmon. Congratulation Fern!

Our Annual Meeting is set for 12:30 PM on Sunday, October 18, 1998, in Bentley's American Grille Restaurant at the Marriott Hotel, 7111 Washington Avenue, Racine. The buffet cost will be picked-up by the Chapter. If you are an AARP member, bring your membership card. The restaurant will only give a senior discount with that card. We would like to save the Chapter a little money if possible. Also on the agenda is our election. Three directors are being elected and your club officers for 1999 will be selected. The nominating committee has not shared the names of the nominees with me, so you will have to attend the meeting or read about it in next month's column, to find out who they are. This has always been a great outing, please try to join us and share the adventure.

The Great Dayton Hamvention will take place in Dayton, Ohio, May 14-17, 1999. For years, I have wanted to attend, but have always waited too long before I

tried to finalize plans. Thus, I have never made it. But, 1999 will be a different story! With plans laid in cement (hopefully they won't change), several individuals have arranged for a bus to take 40 folks to Dayton. The bus will leave Milwaukee, Thursday Morning, May 13, 1999, with pick-up stops in Racine, Kenosha, and near the toll way in Northern Illinois. We will return home Sunday evening, May 17, 1999. We have reservations that include large, 3-bedroom suites. Each bedroom had two twin beds. The bus and all cost except food and your purchases at the Hamvention are included. If you share a bedroom, your total trip cost will be \$139. A bedroom of your own will run your trip cost to \$189. The bus storage area is ample for all your purchases. If you are interested in joining us, let me know. I am taking a \$20 deposit for reservation. Further details will be forth coming as we see if there is sufficient interest for the trip. For clarification or more information, I can be reached by telephone at: (414) 639-7327; e-mail at: wa9jmo@wi.net; FAX: (414) 639-3320; or U S mail: Larry McCalvy, WA9JMO, 5400 Six Mile Road, Racine, WI 53402-9741.

I will attending the QCWA National Convention in Palm Desert, California, October 9-11, 1998. I believe it will an exciting and fun packed week-end. I hope to meet, and explore the future concepts, with the Amateur Radio elite associated with QCWA. I will share my experiences with you next month.

73, Larry McCalvy,
WA9JMO

Red Cedar Repeater Association, Inc.

Steve Hart, KA9OMC, Secretary

E616 810th Avenue

Knapp, WI 54749

2-Meter Repeater: 146.01 Input/146.61 Output

Greetings, RCRA members and guests.

KE9CS, Ken Dicks, reports that the packet system on the TV 28 tower at Wheeler is now active at 145.610 MHz.

WB9OKQ, Lyle Miller at Star Prairie, has made a job move that gets him more involved with communications and test equipment.

N9LIW, Roger Loomis, recently helped NQ9X, Ed Van Sickle, install some new dipoles.

KB9RQE, Dan Holmen at Colfax, got involved in painting the roof on the repeater shed in late August. Dan has also been helping net control on our Monday Nite Net at 6:30 p.m. Future plans may include studies in engineering and taking a Latin course at UW-Eau Claire.

KB9SGY, David Garnett at Eau Claire, is working in the catering business. In his spare time, David is studying the code and practicing with the group on the repeater Thursday nights at 7:30 p.m.

Director K9KGB, David Garnett at Eau Claire, was the guy behind the projector in the early 1960s that showed what we all referred to as "the free movies" at Knapp. A large sheet was stretched between two telephone poles near the lumber yard on Friday nights at dusk. Bill worked with one other person to show these "old westerns" by splitting the rent of \$25 for the film and selling promotion to the local businesses. Small communities like Knapp were busy and popular because of this type

of social invention that Bill offered, and there has been nothing like it since. Thanks, Wild Bill.

KB9NFG, Heather Dick, enjoys music at Eau Claire and is studying the cello.

Our many thanks to the Eau Claire Amateur Radio Club for their recent donation of \$25. The EC ARC is also featuring the RCRA in their next issue of the *Chippewa Valley Feedline*. Many of the senior group with the EC ARC are charter members of RCRA. Thanks to all.

KB9NIR, Scott Kilde, informs the group that his employer, Rex Systems, has additional equipment to donate to RCRA. Our thanks to Rex for their continued support.

WB9YMB, Jim Hilborn, has been cleaning out the garage, and indicates that the repeater will again be the recipient of some good stuff.

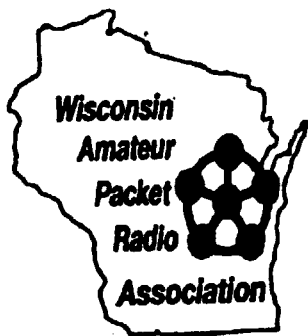
Please plan on joining us for the October social hour at 1414 9th Street at 7:30 p.m. in the L-Mart Shopping Center at the Peppermill Restaurant. See you on October 27.

The repeater has a mint Swan 500CX with microphone and power supply/speaker for \$275. This is a pickup item only. Call (715) 665-2374 for a demonstration.

Steve Hart,
KA9OMC,
RCRA Secretary/Treasurer

CLUB SECRETARIES PLEASE NOTE: As indicated in the masthead on page 2, we ask that you try to have your minutes and any other info you want printed on its way to me no later than five days after your club's meeting. We also ask that, if no information will be sent in any month, you let us know. Thanks for all your cooperation - it's good to work with all of you!

Editor



THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association
Bob Gedemer, KA9JAC
609 Wilson Street • Neenah, WI 54956

Andy Nemec, KB9ALN, Editor • 720 N. Broadway (Upper West) • Green Bay, WI 54303

WAPR News - October, 1998

Allow me to be among the first to wish you a happy Halloween, even though it is nearly a month away. In any case, the fall is upon us and the fall quarterly meeting of WAPR is in the Works. Keep an eye peeled on your local BBS for information regarding this upcoming meeting.

Best-Laid plans? Al, KB9BYQ in Appleton was dangerously close to getting the long-anticipated Black Creek node operational when the storm clouds got too close. That's right, lightning. 4 radios got hit along with 3 TNC's and an antenna. In order to keep the backbone in Northeastern Wisconsin operational, he took that just-completed radio and TNC to use temporarily on his Appleton Node stack. As of this writing, he has put most of the stack back together and also took the time and expense to improve a few of the antennas there. The Appleton Stack is working better than ever to Green Bay.

Word from the western part of the state is that progress has been slow but sure in network expansion. Next month I will try to find out what has been planned and who has been planning it.

That's the short news report for this month. Remember, I have plenty of space available for you news - all you have to do is to get it to me. My various addresses are listed at the top of the page.

Until next month, 73 from Andy.

Troubleshooting Your Packet Station Through Monitoring - Part One

by Andy nemec, KB9ALN

Every one of us has had to deal with a problem packet station at one time or another, unless you are very lucky. Even if the problem station is not yours, you may have been the victim of a poorly set up or maladjusted station on your Local Area Network (LAN) frequency. Sometimes the problems are obvious and easy to find, others require more effort. This time out we will help to speed up the process by looking at your TNC in the monitor mode. I don't mean a "sanitized" monitor mode that only shows you call-signs and text. This monitor mode will show this and a whole lot more.

When properly interpreted, the information gathered through simple observation of the monitor mode can be a great help in troubleshooting. This article is devoted to explaining what you are seeing in the full-blown monitor mode and what it all means. The next article will deal with troubleshooting problems with this information.

Monitor Modes on Various TNC's

Many folks are set up to do only a limited amount of monitoring with their TNC's, they can see packets that are sent "Unproto" and can "listen in" on others when not conversing. Every TNC that I have seen has the capability to not only show the text that others are sending, but the control and acknowledgement packets as well. Most people would rather not see everything because it occupies screen space. For everyday operation this is fine. But looking at the control and acknowledgement information can tell you a lot when you are having trouble.

Of course, the first question is "How do I do that?". This depends on two things; the make and model of your TNC and the type of packet program you use.

Most AEA TNCs assign a "Monitor Level" to this function. Monitor level 4 is used to see other text packets on the frequency, while monitor level 8 shows you all of the control and acknowledgement packets.

TNC-2 compatible models use three commands, MALL, MCOM, and MON. Kantronics models use similar commands. Turning all 3 of these on will allow you to monitor all of the packets you hear, except TCP/IP. In this state, the TNC will only monitor when you are not connected to anyone. Turning MCON to On will allow you to see everything regardless of your connection status. I don't recommend this, it gets awfully hard to converse if you use a typical terminal program.

Which brings us to the topic of your program. Are you using a terminal program, or a "Host" program? Hostmaster, PC-Pakratt and Mac-Pakratt are, along with MFI's communication program. The reason that this is mentioned concerns the way the monitor information is manipulated within the program. For example, Hostmaster II's monitor screen omits packets that are sent by or addressed to you. While this makes sense for most purposes, in our case it omits a lot of valuable information. If you have any doubt as to your host program's quirks in this regard, try a simple terminal program (like Pac-Term). You can always go back to your host program later.

Opening up a New World.

For someone who has never seen this before, it may be an

entirely new world appearing on their screens. Suddenly, one begins to appreciate the complexity of what we have come to think of as routine. It also explains why your DCD light comes on far more often than text is printed on the screen!

Consider what a TNC has to know. First, it has to look for a particular station and ask to connect to it. Then it has to know if a packet has been received, when to say it has, which packet it got, and what to do when it does not hear a packet for one reason or another. This is over and above assembling and disassembling packets, and sending them to your computer. Then it has to know what to do to end a connection.

Typical Packet Exchanges

There is quite a system that goes into making computers talk to one another. When we open up our monitor screens, we can see this process at work. Naturally, all kinds of special control codes and abbreviations are used. Once you know what they mean and understand the general flow of things, it begins to make sense. It looks a bit cryptic, if what you see on your screen looks typical, like this:

WX9APR > W9APR-1: SABM

W9APR-1 > WX9APR: UA

W9APR-1 > WX9APR: I C NS 0 NR 0:
Welcome to Bob's mailbox!

Enter Command (B,J,K,L,R,S,V) >

WX9APR > W9APR-1: RR NS 0 NR 1

WX8PBR > ID: UI

Bill in Dolkville, Mailbox is WX8PBR-1.

WX9TNC > W9APR-1: SABM

W9APR-1 > WX9TNC: DM

Let's take a look at the first two packets that were exchanged. The first station, WX9APR is sending a connect request to W9APR-1, and W9APR-1 responds. The SABM literally translates to "Set Asynchronous Balanced Mode", fancy terminology for "I want to connect with you". UA is translated as "Unnumbered Acknowledgement". This means that WX9APR has connected successfully.

Now that WX9APR is connected to W9APR's mailbox, the information packets can start to be sent. These are numbered so that reception can be verified, acknowledged. Also note the text - WX9APR has received a mailbox greeting message. But note that WX9APR sent a packet back. And it had some numbered codes in there. The first packet says this:

Sending Station Call	Receiving Station Call	Info Packet Type	Connected Mode	NS 0 Send Sequence Number	NR 0 Next Expected Packet Sequence Receive Number
Welcome to Bob's mailbox!					
Enter Command (B,J,K,L,R,S,V) >					

Message Text appearing in this packet. Might appear on the same line as the control info.

As you can see, there is a lot of information being traded here. This lets us know that the two TNC's are connected and they keep track of every packet that is sent and received. Each packet is numbered from 0 through 7. When the packet sequence count reaches 7, a counter in the TNC recycles to 0.

Each TNC is responsible for numbering the packets they send. Notice that it acknowledged each packet with the next expected number, rather than the current one. We see this again in the "RR" packet shown next:

Sending Station	Receiving Station	RR Receiver Ready	NS 0 This is Packet Number 1 Sent	NR 2 The Next Expected Receive Number is 2
Welcome to Bob's mailbox!				

This is an acknowledgement packet. It simply says that "the packet was received correctly and in sequence. Next?"

Below this simple exchange is a "UI", or an "Unnumbered Information" packet - essentially a "broadcast" beacon packet. Because the station is not connected to anyone, there is no need to number the packet. Beacons are not the only function a UI packet, but are the most popular. Another use is for packet "Round-Tables", where it is impossible for a group of stations to group converse in a "connected mode".

The last two packets show what happens when more than one station requests a connect from a single-user station, it sends a "Disconnect Mode" packet. If you have ever seen "Busy From" on your screen, this is how your TNC knows another station is busy.

Note that not all displays are set up like this. There are

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Bob Gedemer KA9JAC/WAPR
609 Wilson St.
Neenah, WI. 54956-3129

additional packet types, such as a "Poll" packet. This is usually seen when one of the stations is idle for a certain length of time. Basically, this is one TNC asking another "Are you still there?" and will also be numbered.

Other packet types indicate the status of the packet connection. For example, RNR tells the sender that it has a full buffer and the sender must pause it's sending. There are a host of abbreviations that go with these packet types. These are included in the accompanying table which you may want to keep handy when you monitor. There is also a short explanation of each abbreviation, to help you decipher what is going on.

If you take some time to study your monitor screen, you can gain a certain amount of knowledge that will be helpful when troubleshooting problems. Next time out, we will look at several common problems and a few unique ones, all diagnosed with the aid of the monitor screen on an ordinary packet terminal program.

Until then, 73 from Andy.



Yellow Thunder Amateur Radio Club

WB9FDZ (Original Club Call)
K9ODK (Robert L. Prine Memorial Call)

Raymond J. Matlosz, N9MLZ, Secretary
450 West 2nd Street • Reedsburg, WI 53959



No quorum. No Meeting. No Election.

The September 1, 1998 meeting of the Yellow Thunder Amateur Radio Club, Inc was not held as only three members were present.

NEXT MEETING: Tuesday, October 6, 1998 at 7:30 p.m. room 14, Baraboo Civic Center.

Raymond J. Matlosz, N9MLZ
Club Secretary

The following members were present:

Bill Hommel KA9QFJ Baraboo
Steve Schulze N9UDO B araboo
Raymond Matlosz N9MLZ Reedsburg

Packet Code Chart

AX.25 CONTROL AND DISPLAY CODES

ABBREVIATION	FRAME TYPE	CODE	DEFINITION
RR	Receiver Ready	RR	Acknowledge or Poll Packet
RNR	Receive Not Ready	RNR	Hold off, rcv buffer full
REJ	Reject	REJ	Packet Out Of Sequence
UI	Unnumbered Info	UI	Beacon or "Unproto" packet
DM	Disconnected mode	DM	Sent when Busy
SABM	Connect request	C	Set Asynch. Balanced Mode
DISC	Disconnect request	D	Close the connection.
UA	Unnumbered ACK	UA	Connect or Disc. Ack.
FRMR	Frame Reject	FRMR	Corrupted Packet.
I	Information	F0	Numbered Info Packet
I	This and UI frames are the only frame types containing text, readable information. I frames are numbered from 0 to 7, and then the count recycles.		
RR	Usually used to acknowledge an I frame. It is also used to "Poll" the other TNC to see if a connection is still "alive", and to respond to a Poll.		
RNR	This is sent when the buffer on the receiving TNC is full.		
REJ	If a receive station does not get the correctly-numbered packet (if one numbered packet is "lost"), then it rejects this packet. It also tells the sender what number packet it is expecting.		
DM	This packet indicates that a connect request cannot be processed, because the TNC is busy, or not set to accept connect requests.		
SABM	A connect request, means "Set Asynchronous Balanced Mode"		
DISC	A Disconnect Request		
A	Sent to acknowledge a Connect (SABM) or Disconnect (DISC) request.		
FRMR	This is a "Frame Reject". This is sent when a packet is seriously corrupted. It is commonly seen when two TNC's attempt to answer the same packet. If two TNC's have the same "MYCALL", they both try to answer a packet. Just as in Voice Communications, they "Double". This will cause an unrecoverable error that causes a "Frame Reject" to be sent, usually followed by a disconnect sequence.		
UI	An Unnumbered Information packet. It is sent as a "broadcast" packet, addressed to no one in particular. A good example is a "beacon" packet. Another is in a packet "Round Table."		

Additional Information on the current version of the AX.25 Amateur Packet Radio Communications Protocol is available through the Tuscon Amateur Packet Radio Association. It is available via the World Wide Web- <http://www.tapr.org>.

THE TEST POINT

(continued from page 3)

DUBUQUE, IA - ARRL/VEC
Dubuque Hamfest. Contact: Carl Clark, NOKAX, 2145 Delicia Drive, Dubuque, IA 52001. (319) 557-9149.

LOVES PARK, IL

Third Saturday of every month. Northern Illinois Volunteer Examiners (WSYI VEC). Held at North Suburban District Library, 6340 North Second St. 9:00 a.m. to noon. No new applicants after 11:00 a.m. Walkins welcome. (Hwy. 251), Loves Park, IL. Contact: Rusty Cordell, WB9QYV, 1823 Hulin St., Rockford, IL 61102-2619. (815) 968-0080. e-mail wb9qyv@aol.com

MINNESOTA TEST INFORMATION

From "The Ground Wave", Saint Paul Radio Club.

Saint Paul Radio Club (SPRC) Contact: Ed VanCleave, W0VC, (612) 636-0108

Test Site: St. Paul Technical College
235 Marshall Ave.
St Paul, MN

TESTING: First Saturday of the month, 8:30 a.m.

Anoka Amateur Radio Club (AARC)

Contact: Craig Johnson, AA0ZZ (612) 483-3143

Test Site: Blaine City Hall
9150 Central Ave NE
Blaine, MN

TESTING: Second Saturday of the month, 9:00 a.m.

Bloomington Office of Emergency Management

(Bloomington Amateur Radio Club (BARC))

Contact: Dan Royer, KE0OR (612) 888-9756

Test Site: Fire Station No. 1
94th St. & Nicollet Avenue S.
Bloomington, MN

TESTING: Fourth Saturday of the month, 9:00 a.m.

Valley Amateur Radio Club (VARC)

Contact: Bill Martin, AI0D (612) 432-0438

Test Site: Hayes Community Center
14601 Hayes Road
Apple Valley, MN

TESTING: Second Thursday of the month 7:00 p.m.

WSYI Group

Contact: Dave Ramney, N0AXL (612) 542-2553

Test Site: Eden Prairie Library
479 Eden Prairie Drive
Eden Prairie, MN

TESTING: Third Tuesday of the month 6:30 p.m.

SE Metro Area Radio Club (SEMARC)

Contact: Dave Harrell, K0BTE (612) 459-8678

Test Site: Cottage Grove fire Station
8641 80th ST., S
Cottage Grove, MN

TESTING: Third Saturday of the month, 9:00 a.m.

The times and places listed above are the usual time and place for each VE team. Occasionally, sessions are canceled or changed. It is a good idea to call ahead to confirm the test time and place

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EXAM INFO: Larry Siebers, KD9IA • (920) 759-1167

• HTTP://W9ZL.AMPR.ORG

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For more information, call:

Glenn, AA9MT: 920-684-7096

Red, N9GHE: 920-684-9097

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For Information Contact:

ECARC

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http://www.ecarc.org

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http://www.thelox.com/~sschulze/hamfest.htm

Bill Klinkner, N9KXX

(608) 643-6908/643-6453

Red Cedar Repeater Association, Inc.

AUCTION

February 23, 1999 • 7:00 p.m.

American Legion Post 53 • 634 Water Street

Eau Claire, WI

CONTACT:

Steve Hart, KA9OMC
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